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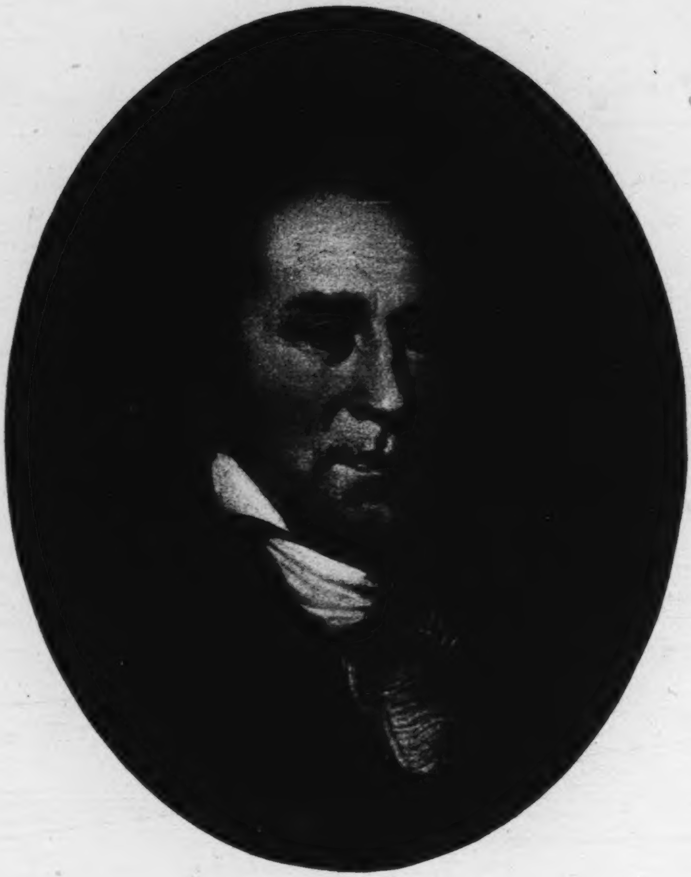
ORIGINAL JOURNALS
OF THE
LEWIS AND CLARK EXPEDITION
1804-1806

IN SEVEN VOLUMES AND AN ATLAS

VOLUME TWO
Journals and Orderly Book of Lewis and Clark, from
Two-Thousand-Mile Creek to Shoshoni
Camp on Lembi River:
May 6, 1805 — August 20, 1805



Wm Clark

ORIGINAL JOURNALS
OF THE
LEWIS AND CLARK EXPEDITION
1804-1806

PRINTED FROM THE ORIGINAL MANUSCRIPTS
in the Library of the American Philosophical Society and
by direction of its Committee on Historical Documents

TOGETHER WITH

MANUSCRIPT MATERIAL OF LEWIS AND CLARK
from other sources, including Note-Books, Letters, Maps, etc.,
and the Journals of Charles Floyd and Joseph Whitehouse

NOW FOR THE FIRST TIME PUBLISHED IN FULL
AND EXACTLY AS WRITTEN

Edited, with Introduction, Notes, and Index, by
REUBEN GOLD THWAITES, LL.D.
Editor of "The Jesuit Relations and Allied Documents," etc.

VOLUME TWO

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To

THEODORE ROOSEVELT, LL.D.

PRESIDENT OF THE UNITED STATES

Upon the Hundredth Anniversary of the Departure of the
Trans-Mississippi Expedition of Lewis and Clark, this
first publication of the Original Records of
their "Winning of the West" is most
respectfully dedicated

Madison, Wisconsin
May 14, 1904

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THE JOURNALS PROPER

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The ORIGINAL JOURNALS OF LEWIS AND CLARK

CHAPTER VIII

PART II

FROM THE YELLOWSTONE TO THE MUSSELSHELL

Lewis's Journal, May 6–22, 1805
Clark's Journal, May 6–22

[Lewis:] *Monday May 6th 1805.*

THE morning being fair and pleasant and wind favourable we set sale at an early hour, and proceeded on very well the greater part of the day; the country still continues level fertile and beautifull, the bottoms wide and well timbered comparitively speaking with other parts of the river; no appearance of birnt hills pumice stone or coal, the salts of tartar or vegitable salts continues to appear on the river banks, sand bars and in many parts of the plains most generally in the little revines at the base of the low hills. passed three streames today which discharged themselves on the Lar^{d} side; the first of these we call little dry creek it contained some water in standing pools but discharged none, the 2ed 50 yards wide no Water, we called it Big dry Creek, the 3rd is [the] bed of a conspicuous river 200 yards wide which we called little dry river; the banks of these streams are low and bottoms wide with but little timber, their beds are almost entirely formed of a fine brown sand intermixed with a small proportion of little pebbles, which were either transparent, white, green, red, yellow or brown. these streams appeared to continue their width without diminution as far as we could perceive them, which with rispect to the river, was many miles, they had recenly discharged their waters. from the appearance of these streams, and the country through which they passed, we concluded that they had their sou[r]ces in level low dry plains, which probably is the character of the countrv for a great distance west of this, or to the vicinity of the black hills, that the country being low on the same leve[l] nearly and in the same parallel of latitude, that the rains in the spring of the year suddonly melts the snow at the same time and causes for a few days a vast quantity of water which finds it's way to the Missouri through those channels; by reference to the diary of the weather &c it will be percieved that there is scarcely any rain during the summer Autumn and winter in this open country distant from the mountains. Fields still continues unwell. saw a brown bear swim the river above us, he disappeared before we can get in reach of him; I find that the curiossity of our party is pretty well satisfyed with rispect to this anamal, the formidable appearance of the male bear killed on the 5th added to the difficulty with which they die when even shot through the vital parts, has staggered the resolution [of] several of them, others however seem keen for action with the bear; I expect these gentlemen will give us some amusement sho[r]tly as they [the bears — Ed.] soon begin now to coppolate [copulate]. saw a great quantity of game of every species common here. Capt Clark walked on shore and killed two Elk, they were not in very good order, we therefore took a part of the meat only; it is now only amusement for Capt. C. and myself to kill as much meat as the party can consum; I hope it may continue thus through our whole rout, but this I do not much expect. two beaver were taken in traps this mo[r]ning and one since shot by one of the party. saw numbers of these anamals peeping at us as we passed out of their wholes which they form of a cilindric shape, by burrowing in the face of the abbrupt banks of the river.

Courses and distances May 6th 1805.

		miles
S. 30° W.	to a Star^{d} point opposite a low bluf, just above which little dry creek falls in on Lar^{d}	1 ½
N. 45° W.	to a point of high timber in a bend on Star^{d} side at the mouth of Lackwater creek 25 y^{ds} wide.	1 ½
N. 40° W.	to a point of high timber on Star^{d} side.	3.
S. 55° W.	to a point of woodland on the Lar^{d} side	3.
S. 70° W.	to a point of woodland Star^{d} side, passing Big dry Creek at ½ M. on Lar^{d}	2 ½
S. 55° W.	to a point of woodland on the Lar^{d} the river making a deep bend to N.W.	2
S. 50° W.	to a point of woodland Star^{d} side opposite a low bluff on Lar^{d} side	1 ¼
S. 60° W.	to the entrance of a river 200 Y^{ds} wide on Lar^{d} side in a bend, this we called little dry river it having no water	¾
North.	to an object in center of a Star^{d} bend, a large sand Island on Lar^{d} side	2 ½
S. 40° W.	to a willow point on the Star^{d} side opposite to a bluff on the Lar^{d} side	4
S. 80° W.	to a clump of high trees on the Star^{d} side passing a point on Lar^{d} at 2 M. on which we encamped for the night	3
	Miles.	25.

May 6th 1805. Point of observation N^{o} 10.

On the Star^{d} side, at the extremity of the 3rd course of this day observed

	h m s		
Equal altitudes of ⊙ with Sextant. A.M.	8.59.57	lost by	Alt^{d} by sex^{t}
	9. 1.35	Clouds	71° 16′ 15″
	". 3.15		

At noon the sun being obscured by clouds I was unable to observe his Altitude; it continued cloudy the ballance of the day and prevented all further observation.

[Clark:] *May 6th Monday 1805*

a fine morning wind from the N.E. we set out early and proceeded on verry well under sail the greater part of the day, passed two creeks & a River to day on the Lar^{d} Side, neither of them discharged any water into the Missouri, they were wide and continued their width for Some distance, the little water of those creeks & the little river must wash the low country, I believe those Streams to be the conveyance of the water of the heavy rains & melting Snows in the countrey back &c. &c. I walked on shore and Killed two Elk neither of which was fat, we saved the best of the meat, one beaver shot to day. the countrey on both sides butifull no appearances of either coal or pumice stone & burnt hills, The Salts of Tarter or white apn. of Salts are yet to be seen.

Course & Distance 6th of May

	miles	
S. 30° W.	1 ½	to the Std Side, at a point opsd. a low bluff just above which on Lard. Little dry creek falls in 25.
N. 45° W.	1 ½	to a point of high timber in a bend to the Std. Side, at the mo: of a Creek 25 yd.
N. 40° W.	3.	to a point of high timber on the Std. Side
S. 55° W.	3.	to a point of wood land on the Ladd. Side
S. 70° W	2 ½	to a point of woodLand on the Std. Side passing a large creek on L.S. at ½ a mile containing but little water
S. 55° W.	2.	to a point of wood land on the Lard. Side the river makeing a Deep bend to the N W.
S. 50° W.	1 ¼	to a point of wood land on the Std. Side opposit a bluff on the Lard Side
S. 60° W.	¾	to the mouth of a river 200 yds. wide in a bend to the Lard. Side, no water running in it at present
North	2 ½	to an object in the center of a Stard. bend, a large Sand Island on Ld pt.
S. 40° W.	4.	to a willow point on the Std. Side opposit to a bluff on the Lard Side
S. 80° W.	3.	to a clump of high trees on the Stard. Side, passing a point on the Lard Side at 2 miles on which we encamped
miles	25	

[Lewis:] *Tuesday May 7th. 1805.*

A fine morning, set out at an early hour; the drift wood begins to come down in consequence of the river's rising; the water is somewhat clearer than usual, a circumstance I did not expect on it's rise. at 11. A.M. the wind became so hard that we were compelled to ly by for several hours, one of the small canoes by the bad management of the steersman filled with water and had very nearly sunk; we unloaded her and dryed the baggage; at one we proceed on the wind having in some measure abated. the country we passed today on the North side of the river is one of the most beautifull plains we have yet seen, it rises gradually from the river bottom to the hight of 50 or 60 feet, then becoming level as a bowling green, extends back as far as the eye can reach; on the S. side the river hills are more broken and much higher tho' some little destance back the country becomes level and fertile. no appearance of birnt hills coal or pumicestone, that of salts still continue. vegitation appears to have advanced very little since the 28th Ulto we continue to see a great number of bald Eagles, I presume they must feed on the carcases of dead anamals, for I see no fishing hawks to supp[l]y them with their favorite food. the water of the river is so terbid that no bird wich feeds exclusively on fish can subsist on it; from it's mouth to this place I have neither seen the blue crested fisher nor a fishing hawk. this day we killed 3 Buffaloe 1 Elk & 8 beaver; two of the Buffaloe killed by Capt Clark near our encampment of this evening wer in good order dressed them and saved the meat, the Elk I killed this morning, thought it fat, but on examination found it so lean that we took the tongue marrowbones and Skin only.

Courses and distances May 7th 1805.

		Miles
South.	to the point of a sand bar on Stard side.	1 ½
North	to a point of woodland on the Lard side opposite a low bluff on Stard side	2.
S. 75° W.	to some high timber in the center of a Std bend.	2
S. 10° W.	to the upper point of a sandbar Stard side	2 ¼
S. 40° W.	to the upper point of the high timber in the center of a Lard bend.	1 ¾
N. 45° W.	to the point of a sandbar Lard side	2 ½
S. 15° W.	to the upper part of the high timber near the center of a Lard bend, passed the upper part of a large sandbar on Stard and encamped on Lard near the extremity of this course.[1]	3
	Mls	15

---

[1] For the camping-places of this part of the route, see Clark's maps in our atlas volume. — Ed.

May 7th 1805 Point of Observation N^{o} 11.

On the Lar^{d} shore near the extremity of the 2^{ed} course of this day observed Equal altitudes with Sextant.

	h	m	s		h	m	s	
A.M.	8.	57.	48.5	P.M.	4.	23.	2.5.	Altit^{d} by Sex^{t}
	".	58.	27.		".	24.	40.	° ′ ″
	9.	⊙–	6		".	25.	21.	70. 28. 15.

Point of Observation N^{o} 12.

On the Lar^{d} shore at the extremity of the 5th course of this day Observed Meridian Alt^{d} of ⊙'^{s} L. L. with Octant by the back observation 67° 16′.–.

Latitude deduced from this observation N 47° 34′ 11.6″
This observation was very satisfactory and may be depended on as accurate.

May 7th 1805. Point of Observation N^{o} 13.

At our encampement of this evening observed time and distance of ☽'^{s} Western limb from Spica η χ with Sextant.

Mean of a set of ten Observations.

	Time			Distance		
	h	m	″	°	′	″
P.M.	10.	33.	47.5	36.	59.	52.5

I could not observe Pollux in consequence of the clouds.

[Clark:] *May 7th Tuesday, 1805*

A fine morning. river rose 1½ Inches last night, the drift wood beginning to run, the water something clearer than usial, the wind became verry hard, and at 11 oClock one canoe by bad Stearing filled with water, which detained is about 3 hours, had a Meridian altitude, the Lat^{d} from which is 47° 36′ 11″ $^{6}/_{16}$ The countrey on the North Side of the Missouri is one of the handsomest plains we have yet seen on the river the plain rises from the river bottom gradually. The Hills on the South Side is high & uneavin. no appearance of coal or burnt hills, that of Salts still appear. vegetation appears to be Slow. I walked on the bank to day and shot

2 beaver, in the evening Killed two Buffalow in tolerable order which we saved and camped on the Lard Side 8 beaver, 3 buffalow & an Elk killed to day

Course & Distance the 7th of May

	miles	
South	1½	to the point of a Sand bar from the Starboard Side
North	2	to a point of wood land on the L.S. opposit a low bluff on the Std Side
S. 75° W.	2	to Some high timber in the center of the bend to the Std Side
S. 10° W.	2¼	to the upper point of a Sand bar Std Sd.
S. 40° W.	1¾	to the upper point of a high timber in a bend to the Lard Side
N. 45° W.	2½	to the point of a Sand bar Lard Side
S. 15° W.	3	to the upper part of a high timber in a bend to the Lard. Side. pa[s]sed the upper part of a large Sand bar
miles	15	

[Lewis:] *Wednesday May 8th 1805.*

Set out at an early hour, under a gentle brieze from the East. a black cloud which suddonly sprung up at S.E. soon over shaddowed the horizon; at 8 A.M. it gave us a slight sprink[l]e of rain, the wind became much stronger but not so much so as to detain us. we nooned it just above the entrance of a large river which disimbogues on the Lard [*Starbd*] side; I took the advantage of this leasure moment and examined the river about 3 miles; I found it generally 150 yards wide, and in some places 200. it is deep, gentle in it's courant and affords a large boddy of water; it's banks which are formed of a dark rich loam and blue clay are abbrupt and about 12 feet high. it's bed is principally mud. I have no doubt but it is navigable for boats perogues and canoes, for the latter probably a great distance. the bottoms of this stream ar wide, level, fertile and possess a considerable proportion of timber, principally Cottonwood. from the quantity of water furnished by this river it must water a large extent of country; perhaps this river also might furnish a practicable and advantageous communication with the Saskashiwan river; it is sufficiently large to justify a belief that it might reach to that river if it's direction be such. the water of this river possesses a peculiar whiteness, being about the colour of a cup of tea with the admixture of a tablespoonfull of milk. from the colour of it's water we called it Milk river.[1] we think it possible that this may be the river called by the Minitares *the river which scolds at all others* or [blank space in MS.] (*This is Maria's river see aftd.*) Capt Clark who walked this morning on the Lard. shore ascended a very high point opposite to the mouth of this river; he informed me that he had a perfect view of this river and the country through which it passed for a great distance probably 50 or 60 Miles,[2] that the country was level and beautifull on both sides of the river, with large herds of Buffaloe distributed throughout: that the river from it's mouth bore N.W. for 12 or 15 Miles when it forked, the one taking a direction nearly North, and the other to the West of N. West. from the appearance of the Vallies and the timber on each of these streams Capt. C. supposed that they were about the same size. great appearance of beaver on this river, and I have no doubt but what they continue abundant, there being plenty of cottonwood and willow, the timber on which they subsist. The country on the Lard. side of the river is generally high broken hills, with much broken, grey black and brown grannite scattered on the surface of the earth in a confused manner. The wild Licquorice is found on the sides of these hills, in great abundance. at a little distance from the river there is no timber to be seen on either side; the bottom lands are not more than one fifth covered with timber; the timber as below is confined to the borders of the river. in future it will be understood that there is no timber of any discription on the upland unless particularly mentioned; and also that one fifth of the bottom lands being covered with timber is considered a large proportion. The white apple is found in great abundance in this neighbourhood; it is confined to the highlands principally. The *whiteapple*,[1] so called by the French Engages, is a plant which rises to the hight of 6 or 9 In^{hs}. rarely exceeding a foot; it puts forth from one to four and sometimes more stalks from the same root, but is most generally found with one only, which is branched but not defusely, is cylindric and villose; the *leafstalks*, cylindric, villose and very long compared with the hight of the plant, tho' gradually diminish in length as they ascend, and are irregular in point of position; the leaf, digitate, from three to five in number, oval 1 Inch long, absolutely entire and cottony: the whole plant of a pale green, except the under disk of the leaf which is of a white colour from the cottony substance with which it is covered. the radix a tuberous bulb; generally ova formed [oviform], sometimes longer and more rarely partially divided or branc[h]ing; always attended with one or more radicles at it's lower extremity which sink from 4 to 6 inches deep. the bulb covered with a rough black, tough, thin rind which easily seperates from the bulb which is a fine white substance, somewhat porus, spungy and moist, and reather tough before it is dressed; the center of the bulb is penitrated with a small tough string or liga-ment, which passing from the bottom of the stem terminates in the extremity of the radicle, which last is also covered by a prolongation of the rind which invellopes the bulb: The bulb is usually found at the debth of 4 inches and frequently much deeper. This root forms a considerable article of food with the Indians of the Missouri, who for this purpose prepare them in several ways. they are esteemed good at all seasons of the year, but are best from the middle of July to the latter end of Autumn when they are sought and gathered by the provident part of the natives for their winter store. when collected they are striped of their rhind and strung on small throngs or chords and exposed to the sun or plased in the smoke of their fires to dry; when well dryed they will keep for several years, provided they are not permitted to become moist or damp; in this situation they usually pound them between two stones placed on a piece of parchment, untill they reduce it to a fine powder, thus prepared they thicken their soope with it; sometimes they also boil these dryed roots with their meat without breaking them; when green they are generally boiled with their meat, sometimes mashing them or otherwise as they think proper. they also prepare an agreeable dish with them by boiling and mashing them and adding the marrow grease of the buffaloe and some buries, untill the whole be of the consistency of a haisty pudding. they also eat this root roasted and frequently make hearty meals of it raw without sustaining any inconvenience or injury therefrom. The White or brown bear feed very much on this root, which their tallons assist them to procure very readily. the white apple appears to me to be a tastless insippid food of itself, tho' I have no doubt but it is a very healthy and moderately nutricious food. I have no doubt but our epicures would admire this root very much, it would serve them in their ragouts and gravies in stead of the truffles morella.

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[1] This is by far the largest of the Missouri's northern tributaries; it heads on the northern border of Montana, near the sources of some southern branches of the Saskatchewan, and drains all the region south of the Saskatchewan watershed. — ED.

[2] Here in the MS. the following words are written with a pencil, probably by Coues: "To see 60 miles would require a height of 1000 feet." — ED.

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[1] Fr. *pomme blanche*; the edible tubers of *Psoralea esculenta*. — Ed.

We saw a great number of buffaloe, Elk, common and *Black taled* deer, goats beaver and wolves. Capt C. killed a beaver and a wolf, the party killed 3 beaver and a deer. we can send out at any time and obtain whatever species of meat the country affords in as large quantity as we wish. we saw where an Indian had recently grained, or taken the hair off of a goatskin; we do not wish to see those gentlemen just now as we presume they would most probably be the Assinniboins and might be troublesome to us. Cap^t C. could not be certain but thought he saw the smoke and some Indian lodges at a considrable distance up Milk river.

Courses and distances of May 8th 1805.

S. 88° W.	to a point of timbered land on the Star^d side opposite to a bluff of black earth	1.½
N. 60° W.	on the Star^d side.	¼
North.	to some high timber on the Lar^d side	2.
East.	to the extremity of a sandbar from a Lar^d point; passed a gulf on Star^d	1.¼
N. 70° W.	to a point of timber Lar^d side	2.
S. 65° W.	to a point of timber on the Star^d side	2.
S. 55° W.	to a point on the Star^d side	2.¼

S. 85° W.	to a point of timbered land on the Lar^d side, passing a projecting point in a bend on Star^d side at 3½ miles	5.¾
S. 74° W.	to a point of woodland on the Star^d side, passing a large river on the Star^d side at ½ a mile we call this Milk river.	4.
N. 5° W.	to a sand point on the Lar^d side	2.½
N. 70° W.	to some high timber on the Lar^d side opposite to a low bluff on Star^d	1.½
S. 18° W.	to a point of high timber on the Star^d side opposite to a bluff on the Lar^d side, short of which one mile, we encamped on the Lar^d side	3.
	Miles.	28

[Clark:] *May the 8th Wednesday* 1805

a verry black cloud to the S W. we set out under a gentle breeze from the N.E. about 8 oClock began to rain, but not sufficent to wet, we passed the mouth of a large river on the Starboard Side 150 yards wide and appears to be navagable. the countrey thro which it passes as far as could be seen from the top of a verry high hill on which I was, is a butifull leavil plain this river forks about N W from its mouth 12 or 15 miles one fork runs from the North & the other to the West of N W. the water of this river will justify a belief that it has its source at a considerable distance, and waters a great extent of countrey. We are willing to believe that this is the River the Minitarres call the river which Scolds at all others the countrey on the Lar^d Side is high & broken with much stone scattered on the hills, In walking on Shore with the Interpreter & his wife, the Squar Geathered on the sides of the hills wild Lickerish, & the white apple as called by the angegees [engagés] and gave me to eat, the Indians of the Missouri make Great use of the white apple dressed in different ways. Saw great numbers of Buffalow, Elk, Antelope & Deer, also black tale deer beaver & wolves, I killed a beaver which I found on the bank, & a wolf. The party killed 3 Beaver 1 Deer I saw where an Indian had taken the hair off a goat skin a fiew days past. Camped early on the Lard Side. The river we passed today we call Milk river from the peculiar whiteness of it's water, which precisely resembles tea with a considerable mixture of milk.[1]

Course and Distance the 8th of May.

	miles	
S. 88° W,	1½	to a point of timbered land on the Std Side opsd a bluff of black earth L.
N. 60° W	¼	on the Starboard Side
North	2	to the high timber on the Lard Side
East	1¼	to the extremity of a Sand bar from the Lard point passed a Gulf
N. 70° W.	2	to a point of timber on Lard Side
S. 65° W.	2	to a point of timber on the Stard Side
S. 55° W.	2¼	to a point on the Stard Side
S. 85° W	5¾	to a point of timbered land on the Lard Side, passing a projected point in a bend to Stard Side at 3½ miles
S. 74° W	4	to a point of wood land on the Stard Side passed a large river on the Std Side at ½ a mile
N. 5° W.	2½	to a sand point on the Lard Side
N. 70° W.	1½	to some high timber on the Ld Side opposit a low bluff on the S.S.
S. 18° W.	3,	to a point of high trees on the Starbord Side opposit a bluff on the Lard Side, we camped one mile Short on the L. Side
miles	28	

[Lewis:] *Thursday May 9th 1805.*

Set out at an early hour; the wind being favourable we used our sails and proceeded very well; the country in appearance is much as yester[day], with this difference that the land appears more fertile particularly of the Lard hills which are not so stoney and less broken; the timber has also in some measure declined in quantity. today we passed the bed of the most extraordinary river that I ever beheld. it is as wide as the Missouri is at this place or ½ a mile wide and not containing a single drop of runing water; some small standing pools being all the water that could be perceived. it falls in on the Lar^d side. I walked up this river about three miles and ascended an eminence from which I could perceive it many miles; it's course about South for 10 or 12 Miles, when it veered around to the E of S.E. as far as I could see. the valley of this river is wide and possesses but a scanty proportion of timber; the hills which border it are not very high nor is the country very broken; it is what may properly be designated a wavy or roling country intersperced with some handsom level plains. the bank[s] are low and abbrupt, seldom more than 6 or eight feet above the level of the bed, yet show but little appearance of being overflown; they are of black or yellow clay or a rich sandy loam. the bed is entirely composed of a light brown sand the particles of which as well as that of the Missoury are remarkably fine. this river I presume must extend back as far as the black hills and probably is the channel through which a great extent of plain country discharge their superfluous waters in the spring season. it had the appearance of having recently discharged it's waters; and from the watermark, it did not appear that it had been more than 2 feet deep at it's greatest hight. This stream (if such it can properly be termed) we called Big dry river. about a mile below this river on the same side a large creek falls in also dry at present. The mineral salts and quarts [quartz] appear in large quantities in this neighbourhood. the sand of the Missouri from it's mouth to this place has always possessed a mixture of granulated talk [talc] or I now think most probably that it[1] is this quarts. Capt C. killed 2 bucks and 2 buffaloe, I also killed one buffaloe which proved to be the best meat, it was in tolerable order; we saved the best of the meat, and from the cow I killed we saved the necessary materials for making what our wrighthand cook Charbono calls the *boudin* (*poudingue*) *blanc*, and immediately set him about preparing them for supper; this white pudding we all esteem one of the greatest del[ic]acies of the forrest, it may not be amiss therefore to give it a place. About 6 feet of the lower extremity of the large gut of the Buffaloe is the first mo[r]sel that the cook makes love to, this he holds fast at one end with the right hand, while with the forefinger and thumb of the left he gently compresses it, and discharges what he says *is not good to eat*, but of which in the s[e]quel we get a moderate portion; the mustle lying underneath the shoulder blade next to the back, and fillets are next saught, these are needed up very fine with a good portion of kidney suit [suet]; to this composition is then added a just proportion of pepper and salt and a small quantity of flour; thus far advanced, our skilfull opporater C——o seizes his recepticle, which has never once touched the water, for that would intirely distroy the regular order of the whole procedure; you will not forget that the side you now see is that covered with a good coat of fat provided the anamal be in good order; the operator sceizes the recepticle I say, and tying it fast at one end turns it inward and begins now with repeated evolutions of the hand and arm, and a brisk motion of the finger and thumb to put in what he says is *bon pour manger;* thus by stuffing and compressing he soon distends the recepticle to the utmost limmits of it's power of expansion,[1] and in the course of it's longtudinal progress it drives from the other end of the recepticle a much larger portion of the [blank space in MS.] than was prev[i]ously discharged by the finger and thumb of the left hand in a former part of the operation; thus when the sides of the recepticle are skilfully exchanged the outer for the iner, and all is compleatly filled with something good to eat, it is tyed at the other end, but not any cut off, for that would make the pattern too scant; it is then baptised in the missouri with two dips and a flirt, and bobbed into the kettle; from whence, after it be well boiled it is taken and fryed with bears oil untill it becomes brown, when it is ready to esswage the pangs of a keen appetite or such as travelers in the wilderness are seldom at a loss for.

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[1] This last sentence is in Lewis's handwriting. — Ed.

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[1] Here Lewis apparently skipped five leaves of his book, by some oversight, and did not notice the error until he had covered ten leaves more: then returning (May 14) to this point, he filled the five blank leaves with the record of May 15–19. — Ed.

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[1] Matthews states (*Ethnog. Hidatsa*, pp. 23, 24) that the Mandan and their allies practised a form of cooking which apparently suggested to Charbonneau his *boudin blanc:* "Sometimes they chopped the fresh meat fine, put it in a piece of bowel, and thus made a sort of sausage, which was usually boiled." — Ed.

we saw a great quantity of game today particularly of Elk and Buffaloe, the latter are now so gentle that the men frequently throw sticks and stones at them in order to drive them out of the way. we also saw this evening emence quantities of timber cut by the beaver which appeared to have been done the preceeding year, in [one] place particularly they had cut all the timber down for three acres in front and on nearly one back from the river and had removed a considerable proportion of it, the timber grew very thick and some of it was as large as a man's body. the river for several days has been as wide as it is generally near it's mouth, tho' it is much shallower or I should begin to dispair of ever reaching it's source; it has been crouded today with many sandbars; the water also appears to become clearer, it has changed it's complexin very considerably. I begin to feel extreemly anxious to get in view of the rocky mountains.

I killed four plover this evening of a different species from any I have yet seen; it resembles the grey or whistling plover more than any other of this family of birds; it is about the size of the yellow legged or large grey plover common to the lower part of this river as well as most parts of the Atlantic States where they are sometimes called the Jack curloo; the eye is moderately large, are black with a narrow ring of dark yellowish brown; the head, neck, upper part of the body and coverts of the wings are of a dove coloured brown, which when the bird is at rest is the predominant colour; the brest and belley are of a brownish white; the tail is composed of 12 feathers of 3 In^s being of equal length, of these the two in the center are black, with traverse bars of yellowish brown; the others are a brownish white. the large feathers of the wings are white tiped with blacked. the beak is black, 2½ inches in length, slightly tapering, streight, of a cilindric form and blontly or roundly pointed; the chaps are of equal length, and nostrils narrow. longitudional and connected; the feet and legs are smoth and of a greenish brown; has three long toes and a sho[r]t one on each foot, the long toes are unconnected with a web, and the short one is placed very high up the leg behind, insomuch that it dose not touch the ground when the bird stands erect. the notes of this bird are louder and more various than any other of this family that I have seen.[1]

Courses and distances of May 9thth. 1805.

		Miles
N. 30° W.	to a clump of high trees on the Star^d side in a bend	2 ½
S. 15° W.	to the upper part of the Lar^d point, passing over a large sand bar, at the upper point of a large Island in a deep bend to the N.	2 ½
S. 5° W.	to a point of high timber on the Star^d side, opposite to a bluff point on Lar^d side	3.
S. 20° E.	to a willow point on the Star^d side	6.
S. 10° E.	to the entrance of big Dry river on Lar^d sid^e	1 ¼
S. 85° W.	to a bluff point on the Lar^d side	1 ½
N. 60. W.	to a tree in the center of a bend on star^d passing over a sand point from Lar^d side	3.
South.	to the upper part of a timbered bottom in a bend on Lar^d side.	1 ¾
S. 60. W.	to the entrance of a small creek, in a bend on Star^d side called Werner's C.[2] where we encamped for the night (the water this Creek contained was principally backwater)	3
	Miles —	24 ½

Point of Observation N^o., 14.

At our encampment of this evening, observed time and distance of ☽'s Western limb from Regulus, ✱ West. with Sextant.

The mean result of a set of 10. obser^{tns}

	Time h. m. s.	Distance ° ′ ″
P. M.	10. 6. 13. 4.	43. 30. 15.

☞ It clouded up suddonly and prevented my takeing any observations with Antares.

[Clark:] *May 9th Thursday 1805*

a fine Day wind from the East we proceeded on verry well the countrey much the appearance which it had yesterday the bottom & high land rich black earth, Timber not so abondant as below, we passed the mouth of a river (or the appearance of a river) on the Lar^d Side the bend of which as far as we went up it or could See from a high hill is as large as that of the Missouri at this place which is near half a mile this river did not contain one drop of running water, about a mile below this river a large creeke joins the river L.S. which is also Dry. Those dry Streams which are also verry wide, I think is the conveyance of the melted Snow, & heavy rains which [it] is Probable fall in from the high mountainous Countrey which is said to be between this river & the Yellow Stone river. I walked on shore the fore part of this day, & observed Great quantities of the Shining Stone which we view as *quarts.* I killed 2 Bucks & a Buffalow, Cap^t Lewis also killed one which verry good meat, I saw enumerable herds of buffalow, & goats to day in every direction. The Missouri keeps its width which is nearly as wide as near its mouth, great number of sand bars, the water not so muddy & sand finer & in smaller perpotion. Cap^t Lewis killed 4 pleaver different from any I have ever before seen, larger & have white breast & the under-feathers of the wings are white &c.

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[1] *Symphemia semipalmata.* — Ed.

[2] The expedition had during the day passed the site of Fort Peck. Werner's Creek was just above. — Ed.

Course & Distance 9th of May

	miles	
N. 30° W.	2½	to a clump of high trees on the Star^d Side in a bend
S. 15° W.	2½	to the upper part of the Lard point, passing over a large sand bar at the upper p^t of a willow Island in a deep bend to the N.
S. 5° W.	3	to a point of high timber on the St^d Side ops^d a bluff p^t on the L^d Side
S. 20° E.	6	to a willow point on the St^d Side
S. 10° E	1¼	to the enterance of a Great Dry river on the Lar^d Side
S. 85° W.	1½	to a bluff point on the Lar^d Side
N. 60° W.	3	to a tree in a bend to the St^d Side passing over a sand p^t from L.S.
South	1¾	to the upper part of the timbered bottom on the La^d Side in a bend
S 60° W	3 m	to the mouth of a small creek in a bend to the Sta^d Side in the mouth of which we came too for the night and called this creek Verner's Creek, the water it contained was principally backwater[1]
	m 24½	

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[1] The sentence after the word "for," is in Lewis's handwriting. — Ed.

[Lewis:] *Friday May 10th 1805.*

Set out at sunrise and proceeded but a short distance ere the wind became so violent that we were obliged to come too, which we did on the Lard side in a suddon or short bend of the river where we were in a great measure sheltered from the effects of the wind. the wind continued violent all day, the clouds were thick and black, had a slight sprinkle of rain several times in the course of the day. we sent out several hunters to scower the country, to this we were induced not so much from the want of provision as to discover the Indians whome we had reasons to believe were in the neighbourhood, from the circumstance of one of their dogs comeing to us this morning shortly after we landed; we still beleive ourselves in the country usually hunted by the Assinniboins, and as they are a vicious illy disposed nation we think it best to be on our guard; accordingly we inspected the arms and accoutrements of the party and found them all in good order. The hunters returned this evening having seen no tents or Indians nor any fresh sign of them; they killed two Mule deer, one common fallow or longtailed deer, 2 Buffaloe and 5 beaver, and saw several deer of the Mule kind of immence size, and also three of the Bighorned anamals. from the appearance of the Mule deer and the bighorned anamals we beleive ourselves fast approaching a hilly or mountainous country; we have rarely found the mule deer in any except a rough country; they prefer the open grounds and are seldom found in the woodlands near the river; when they are met with in the woodlands or river bottoms and are pursued, the[y] invariably run to the hills or open country as the Elk do. the contrary happens with the common deer. ther are several esscential differences between the Mule and common deer as well in form as in habits. they are fully a third larger in general, and the male is particularly large; I think there is somewhat greater disparity of size between the male and female of this species than there is between the male and female fallow deer; I am convinced I have seen a buck of this spcies twice the volume of a buck of any other species. the ears are peculiarly large, I measured those of a large buck which I found to be eleven inches long and 3½ in width at the widest part; they are not so delicately formed, their hair in winter is thicker longer and of a much darker grey, in summer the hair is still coarser longer and of a paleer red, more like that of the Elk; in winter they also have a considerable quantity of a very fine wool intermixed with the hair and lying next to the skin as the Antelope has. the long hair which grows on the outer sides of the 1st joint of the hinder legs, and which in the common deer do not usually occupy more than 2 inches in them occupys from 6 to eight; their horns also differ, these in the common deer consist of two main beams from which one or more points project the beam graduly deminishing as the points procede from it, with the mule deer the horns consist of two beams which at the distance of 4 or 6 inches from the head divide themselves each into two equal branches which again either divide into two other equal branches or terminate in a smaller, and two equal ones; having either 2. 4 or 6 points on a beam; the horn is not so rough about the base as the common deer and are invariably of a much darker colour. the most striking difference of all, is the white rump and tale. from the root of the tail as a center there is a circular spot perfectly white of abot 3 inches radius, which occupys a part of the rump and extremitys of the buttocks and joins the white of the belley underneath; the tail which is usually from 8 to 9 inches long, for the first 4 or 5 inches from it's upper extremity is covered with sho[r]t white hairs, much shorter indeed than the hairs of the body; from hence for about one inch further the hair is still white but gradually becomes longer, the tail then terminates in a tissue of black hair of about 3 Inches long. from this black hair of the tail they have obtained among the French engages the appelation of the black taled deer, but this I conceive by no means characteristic of the anamal as much the larger portion of the tail is white. the year and the tail of this anamal when compared with those of the common deer, so well comported with those of the mule when compared with the horse, that we have by way of distinction adapted the appellation of the mule deer which I think much more appropriate. on the inner corner of each eye there is a drane or large recepicle which seems to answer as a drane to the eye which gives it the appearance of weeping, this in the common deer of the atlantic states is scarcely perceptable but becomes more conspicuous in the fallow deer, and still more so in the Elk; this recepticle in the Elk is larger than in any of the pecora order with which I am acquainted.

Boils and imposthumes [i. e., abscesses] have been very common with the party Bratton is now unable to work with one on his hand; soar eyes continue also to be common to all of us in a greater or less degree. for the imposthume I use emmolient poltices, and for soar eyes a solution of white vitriol and the sugar of lead in the proportion of 2 g$^{r.}$ of the former and one of the latter to each ounce of water.

Courses and distances May 10th 1805.

South	to a naked point on the Star$^{d.}$ side	1¼
S. 10° W.	to a point on the Lar$^{d.}$ side opposite to a bluff on Lar$^{d.}$ water strong	1¾
N. 45° E.	to the upper part of some timber in a bend on Lar$^{d.}$ side, where we encamped	1¼
	Miles	4¼

Point of Observation N$^{o.}$ 15.

On the Lar$^{d.}$ shore about the middle of the 3$^{rd.}$ course of this day. took Equal altitudes of ⊙ with sextant.

	h m s		
A.M.	8.58.14 ".59.48 9. 1.31	P.M. lost by the clouds	Alt$^{d.}$ of Sext. 72. 12. 45.

[Clark:] *May the 10th Friday* 1805

river fell ¾ of an inch last night, wind from the N.W., we proceeded on but a short distance e're the wind became so violent we could not proceed came to on the Lar$^{d.}$ Side in a short bend, the wind continued all day Several times in the course of the day we had some fiew drops of rain from verry black clouds, no thunder or lightning latterly, Soon after we landed a Dog came to us from the opposit Side, which induced a belief that we had not passed the Assinniboin Indians, parties wer sent on the hills in different derections to examine but saw no tents or fresh Sign. examined the arms &^{c} of the party found all in good order. Three mule deer, two Buffalow & 5 beaver killed, 3 of the mountain ram Seen.

Cours & Distance the 10th of May 1805

South.	1¼	miles to a naked point on the Star^d Side
S. 10° W.	1¾	miles to a point on the Lar^d Side opposit to a Bluff on the Star^d Side water Strong
N. 45° E.	1¼	to the upper part of some timber in a bend to the Lard Side, at which place we camped
	4¼	

The mule Deer Described in Book N^o 8.

[Lewis:] *Saturday May 11th 1805.*

Set out this morning at an early hour, the courant strong; and river very crooked; the banks are falling in very fast; I sometimes wonder that some of our canoes or perogues are not swallowed up by means of these immence masses of earth which are eternally precipitating themselves into the river; we have had many hairbreadth escapes from them but providence seems so to have ordered it that we have as yet sustained no loss in consequence of them. The wind blue very hard the forepart of last night but abated toward morning; it again arose in the after part of this day and retarded our progress very much. the high lands are broken, the hills higher and approach nearer the river, tho' the soil of both hills and bottoms appear equally as furtile as below; it consists of a black looking lome with a moderate portion of sand; the hills and bluffs to the debth of 20 or thirty feet, seemed to be composed entirely of this loam; when thrown in the water it desolves as readily as loaf sugar and effervesses like marle. great appearance of quarts and mineral salts, the latter appears both on the hills and bottoms, in the bottoms of the gullies which make down from the hills it lies incrusting the earth to the debth of 2 or 3 inches, and may with a fether be swept up and collected in large quantities, I preserved several specimines of this salts. the quarts appears most commonly in the faces of the bluffs. no coal, burnt hills, or pumice stone. saw today some high hills on the Stard. whose summits were covered with pine. Capt Clark went on shore and visited them; he brought with him on his return som of the boughs of this pine it is of the pitch kind but I think the leaves somewhat longer than ours in Virginia. Capt C. also in his walk killed 2 Mule deer a beaver and two buffaloe; these last he killed about 3 miles above where we encamped this evening in the expectation that we would reach that place, but we were unable to do so from the adverse winds and other occurrences, and he came down and joined us about dark. there is a dwarf cedar growing among the pine on the hills; it rises to the hight [of] thre[e] sometimes 4 feet, but most generally spreads itself like a vine along the surface of the earth, which it covers very closely, puting out roots from the underside of the limbs; the leaf is finer and more delicate than the common red ceader, it's fruit and smell are the same with the red ceader. the tops of these hills which produce the pine and cedar is of a different soil from that just described; it is a light coloured poor sterile sandy soil, the base usually a yellow or white clay; it produces scarcely any grass, some scattering tuffts of sedge constitutes the greater part of it's grass. About 5.P.M. my attention was struck by one of the Party runing at a distance towards us and making signs and hollowing as if in distress, I ordered the perogues to put too, and waited untill he arrived; I now found that it was Bratton the man with the soar hand whom I had permitted to walk on shore, he arrived so much out of breath that it was several minutes before he could tell what had happened; at length he informed me that in the woody bottom on the Lard. side about 1½ [miles] below us he had shot a brown bear which immediately turned on him and pursued him a considerable distance but he had wounded it so badly that it could not overtake him; I immediately turned out with seven of the party in quest of this monster, we at length found his trale and persued him about a mile by the blood through very thick brush of rosbushes and the large leafed willow; we finally found him concealed in some very thick brush and shot him through the skull with two balls; we proceeded [to] dress him as soon as possible, we found him in good order; it was a monstrous beast, not quite so large as that we killed a few days past but in all other rispects much the same the hair is remarkably long fine and rich tho' he appears parshally to have discharged his winter coat; we now found that Bratton had shot him through the center of the lungs, notwithstanding which he had pursued him near half a mile and had returned more than double that distance and with his tallons had prepared himself a bed in the earth of about 2 feet deep and five long and was perfectly alive when we found him which could not have been less than 2 hours after he received the wound; these bear being so hard to die reather intimedates us all; I must confess that I do not like the gentlemen and had reather fight two Indians than one bear; there is no other chance to conquer them by a single shot but by shooting them through the brains, and this becomes difficult in consequence of two large muscles which cover the sides of the forehead and the sharp projection of the center of the frontal bone, which is also of a pretty good thickness. the flece and skin were as much as two men could possibly carry. by the time we returned the sun had set and I determined to remain here all night, and directed the cooks to render the bear's oil and put it in the kegs which was done. there was about eight gallons of it.

the wild Hysop grows here and in all the country through which we have passed for many days past; tho' from big Dry river to this place it has been more abundant than below, and a smaller variety of it grows on the hills, the leaves of which differ considerably being more deeply indented near it's extremity. the buffaloe deer and Elk feed on this herb in the winter season as they do also on the small willow of the sandbars. there is another growth that begins now to make it's appearance in the bottom lands and is becoming extreemly troublesome; it is a shrub which rises to the hight of from two to four feet, much branched, the bark of the trunk somewhat rough hard and of light grey colour; the wood is firm and stif, the branches beset with a great number of long, sha[r]p, strong, woody looking thorns; the leaf is about ¾ or an inch long, and one ⅛ of an inch wide, it is obtuse, absolutely entire, veinless fleshy and gibbose; has no perceptable taste or smell, and no anamal appears to eat it by way of designating when I mention it hereafter I shall call it the *fleshey leafed thorn.*[1]

Courses and distances May 11th 1805.

South —	to the upper part of some high timber on the Lar^d side passing over a sand po[i]nt Lar^d	1 ½
S. 50° W.	to the upper part of the timber in a bend on Star^d side	1 ½
South.	to the commencement of a wood on Star^d side, opposite to a Lar^d point	¾
S. 68° E.	to the upper part of the timber in a bend on Lar^d side, passing over a sand-bar from a Star^d point	1 ¾
S. 10° E.	to the upper part of a sand-bar on the Star^d side opposite to a bluff	1 ½
S. 85° W.	to some timber in the center of a bend on Star^d side, passing a sand point on Lar^d at ¾	2.
S. 10° E.	to a point of woodland on the Lar^d side.	1.
S. 40° E.	to the point of a sand-bar on Star^d oposite to a low bluf.	2 ½
S. 80° W.	to a point of woodland on the Lar^d side, passing a point of woodland on St^d side at ½ a mile, a deep bend to the N.W.	1 ¼
S. 75° W.	to a high bluff point in a bend on Star^d (S.W. from hence distant 3 Miles is a ridge of high lands covered with pine which is the first we have yet seen on the Missouri)	1.
S. 25° E.	to the point of a sand-bar on the Star^d ½ below which we encamped on the Lar^d	2 ¼
	Miles	17.

Point of Observation N^o 16.

On the Lar^d shore about the middle of the 4th course of this day observed equal altitudes of ☉ with Sex^t

A M. 8. 15. 33 –	P. M. lost in consequence of the intervention of clouds	Alt^d by Sextant 58° 41′ 30″
″. 17. 7.5		
″. 18. 43		

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[1] This paragraph in the MS. is marked "Copy for Dr. Barton." The plant is that locally known as "greasewood" (*Scarobatus vermiculatus*). — Ed.

Point of Observation N^{o}. 17.

On the Lar^{d}. shore at the middle of the 8th course of this day, observed Meridian alt^{d}. of ⊙.

L. L. with Octant by the back observation $\overset{\circ}{64}.\ \overset{\prime}{51}.$

Latitude deduced from this observt^{n}. [blank space in MS.]

[Clark:] *May the 11th Satturday 1805*

Wind hard fore part of last night the latter part verry cold a white frost this morning, the river riseing a little and verry crooked the high land is rugged and approaches nearer than below, the hills and bluff[s] exhibit more mineral qua[r]ts & salts than below, the gullies in maney places are white, and their bottoms one, two & 3 Inches deep of this mineral, no appearance of either burnt pumice stone or coal, the countrey hilley on both sides, of a rich black earth, which disolves in water. This kind of countrey continues of the Same quallity for maney miles on either Side, we ~~observed some~~ hills which appeared to be timbered, I walked to this timber and found it to [be] pitch pine & Dwarf cedar. we observe in every derection Buffalow, Elk, Antelopes & Mule Deer inumerable and so jintle that we could approach near them with great ease, I killed 2 Mule Deer for the benifit of their Skins for the party, and about the place I expected the party would get to camp I killed 2 fat Bulls for theire use, in my absence they had killed a fine fat yellow *bear* below which detained them and they did not reach the place I expected, but had camped on the Lar^{d} Side about 2 miles below on my return to the party I killed a fat Beaver the wind blew verry hard from the S. W. all the after part of this day which retarded our progress verry much. river rose 2 In.

Course & Distance the 11th. of May

	miles	
South	1½	to the upper part of a high timber on the Star^{d} Side passing over a sand point from the L^{d} Side
S. 50° W.	1½	to the upper part of the timber'd in a bend to the Star^{d} Side.

South	¾	to the Commencement of a wood on the St^d Side ops^d a point on L.S.
S 68° E	1¾	to the uppar part of the timber in a bend on the Lar^d Side passing over a sand bar from Star^d point
S. 10° E	1½	to the upper part of a sand bar on the Star^d Side opposit a Bluff
S. 85° W.	2	to some timber in the center of a bend on the Star^d Side passing a sand point on the Lar^d at ¾ of a mile
S. 10° E.	1	to a point of wood land on the Lar^d Side
S. 40° E.	2½	to the point of a Sand bar on the Star^d Side opposit a low bluff
S. 86° W.	1¼	to a point of wood land on the Lar^d Side passing a p^t of wood land on S. S. at ½ m. a Deep bend to N W.
S. 75° W	1	to a high bluff point in a bend to the St^d Side S W 3 miles is a ridge of high land covered with *pine* which is the first we have seen on Missouri
S 25° E	2¼	to the p^t of a sand bar on the Star^d ½ a mile below which, we encamped
miles	17	

[Lewis:] *Sunday May* 12th 1805.

Set out at an early hour, the weather clear and Calm; I walked on shore this morning for the benifit of exersize which I much wanted, and also to examine the country and it's productions, in these excurtions I most generally went alone armed with my rifle and espontoon; thus equiped I feel myself more than an equal match for a brown bear provided I get him in open woods or near the water, but feel myself a little diffident with respect to an attack in the open plains, I have therefore come to a resolution to act on the defencive only, should I meet these gentlemen in the open country. I ascended the hills and had a view of a rough and broken country on both sides of the river; on the North side the summits of the hills exhibit some scattering pine and cedar, on the South-side the pine has not yet commenced tho' there is some cedar on the face of the hills and in the little ravines. the choke cherry also grows here in the hollows and at the heads of the gullies; the choke Cherry has been in blume since the ninth ins^t this growth has freequently made it's appearance on the Missouri from the neighbourhood of the *Bald pated Prarie*, to this place. in the form of it's leaf, colour and appearance of it's bark, and general figure of it's growth it resembles much the Marillar [Morello] cherry, tho' much smaller not generally rising to a greater hight than from 6 to 10 feet and ascociating in thick clusters on clumps in their favorit situations which is usually the head of small ravines or along the sides of small brooks which flow from the hills. the flowers which are small and white are supported by a common footstalk as those of the common wild cherry are, the corolla consists of five oval petals, five stamen and one pistillum, and of course of the Class and order Pentandria Monogynia. it bears a fruit which much resembles the wild cherry in form and colour tho' larger and better flavoured; it's fruit ripens about the begining of July and continues on the trees untill the latter end of September. The Indians of the Missouri make great uce of this cherry which they prepare for food in various ways, sometimes eating when first plucked from the trees or in that state pounding them mashing the seed boiling them with roots or meat, or with the prarie beans and white apple; again for their winter store they geather them and lay them on skins to dry in the sun, and frequently pound them and make them up in small roles or cakes and dry them in the sun; when thus dryed they fold them in skins or put them in bags of parchment and keep them through the winter either eating them in this state or boiling them as before mentioned. the bear and many birds also feed on these burries. the wild hysop sage, *fleshey leaf thorn*, and some other herbs also grow in the plains and hills, particularly the arromatic herb on which the Antelope and large hare feed. The soil has now changed it's texture considerably; the base of the hills and river bottoms continue the same and are composed of a rich black loam while the summits of the hills and about half their hight downwards are of a light brown colour, poor sterile and intermixed with a coarse white sand. about 12 OClock the wind veered about to the N.W. and blew so hard that we were obliged to Ly by the ballance of the day. we saw great quantities of game as usual. the bottom lands still becomeing narrower.

Courses and distances May 12th 1805.

S. 45° W.	to a point of high wood on the Stard side passing a bluff on Lard just above which a creek 20 yards wide falls in on Lard Sd	1.
S. 70° W.	to a point of cottonwood on the Lard Sd	2 ½
S. 30° W.	to the upper part of a point on the Lard Sd opposite to a bluf on Stard side	½
S. 22° E.	to a white tree in a bend on Lard side	2
S. 40° W.	to a point on Stard opposite to a bluff on Lard	1 ½
S. 60° W.	to the upper part of a timbered bottom in a bend on Stard side	2 ½
S. 40° W.	to a point of woodland on the Lard side, opposite to which pine Creek falls in on Stard side 20 Yds wide, little water	1 ¾
S. 10° E.	to a willow point on the Stard side	1 ½
S. 45° W.	Along the Stard side opposite to a bluff	1.
N. 54° W.	to some timber in the center of a bend Sd	1 ½
S. 15° W.	to a point of woodland on the Lard side opposite to a bluff on Stard	1.
S. 10° W.	to a point of woodland on the Stard side opposite to a high bluff, the river making a deep bend to the S. E. in which there is a willow Island, opposite to the lower point of which we encamped on the Lard side	2.
	Miles-	18 ¾

About sunset it began to rain, and continued to fall a few drops at a time untill midnight; the wind blew violently all night.

[Clark:] *May 12th Sunday 1805.*

Set out at an early hour, the morning clear and calm, Capt Lewis walked on Shore this morning about 12 oClock the wind became strong from the E. about half past one oClock the wind Shifted round to the N.W. and blew verry hard all the latter part of the day, which obliged us to Lay by. The countrey is hilley & rugged and the earth of a lightish brown and but indifferent, some small cedar is scattered on the Sides of the hils & in the hollars, some pine ridges is also to be seen on the North Side, we observe great quantitis of game as usial. I killed a beaver on the water, Saw Several Sitting on the bank near the waters edge

Course & Distance 12th of May

	mile	
S. 45° W.	1	to a point of high wood on the Star^d Side passing a Bluff on the L^d Side above which a Creek 20 y^{ds} wide falls in L.S.
S. 70° W.	2½	to a point of cotton wood on the Lar^d Side
S. 30° W.	½	to the upper part of the point on the Lar^d Side opposit a bluff S.S.
S. 22° E.	2	to a white tree in a bend to the L.^{d} S.
S. 40° W.	1½	to the point on the Star.^{d} Side opposit a Bluff on the L.S.
S. 60° W.	2½	to the upper part of a timber^d bottom in a bend to the St.^{d} Side
S. 40° W.	1¾	to a point of wood land on the Lar^d Side, opposit to which *Pine* Creek falls in on the Star^d Side 20 yards wide
S. 10° E.	1½	to a willow point on the Sta^d Side
S. 45° W.	1	on the Star^d Side opposit a Bluff
N. 54° W.	1½	to some timber in the center of the Star^d Bend
S. 15° W.	1	to a point of wood land on the Lard Side opposit a Bluff.
S. 10° W.	2	to a point of wood land on the Star^d Side opposit a high Bluff on the Lar^d Side, the river makeing a deep bend to the S E in which there is a Willow Island, opposit the lower point of which we camped on the Lar^d Side
	18¾	

about sunset it began to rain, and rained very moderately only a fiew drops at a time for about half the night, wind continued violent all night.

[Lewis:] *Monday May 13th 1805.*

The wind continued to blow so violently this morning that we did not think it prudent to set out. sent out some hunters. At 1 P.M. the wind abated, and altho' the hunters had not all returned we set out; the courant reather stronger than usual and the water continues to become reather clearer, from both which I anticipate a change of Country shortly. the country much the same as yesterday; but little timber in tne bottoms and a scant proportion of pine an cedar crown the Star^d hills. Capt C. who was on shore the greater part of the day killed a mule and a Common deer, the party killed several deer and some Elk principally for the benefit of their skins which are necessary to them for cloathing, the Elk skins I now begin to reserve for making the leather boat at the falls. the hunters joined us this evening; Gibson had wounded a very large brown bear but it was too late in the evening to pursue him.

Courses and distances May 13th 1805.

S 35° W.	along the Star^d shore to a point of high timber opposite to a bluff, passing the entrance of two Creeks on Lar^d, 1st 18. 2nd 30 yards wide neither discharging any water at present	1 ½
S. 50° W.	Along the Star^d point opposite to a high blf.	1.
N. 75° W.	to a point of woodland on the Lar^d side	2
S. 80° W.	Along the Lar^d shore to a point of wood land near which we encamped on Lar^d shore	2 ½
	Miles.	7.

Point of Observation N^o 18.

At our encampment of this evening on Lar^d side Observed time and distance of ☽'s Western limb from Antares; ✱. East; with Sextant.

Mean of sundry Observations.

	Time			Distance		
	h	m	s	°	′	″
P.M.	11.	51.	18.4	39.	10.	30.

[Clark:] 13th of *May Monday* 1805

The wind continued to blow hard untill one oClock P M. to day at which time it fell a littlc and we set out and proceeded on verry well about 9 miles and camped on the Lar^d Side. the countrey much the same appearance as yesterday but little timber in the bottoms, some Pine in places on the Star^d Hills.

I killed two deer this evening one a mule deer & the other a common Deer, the party killed several this morning all for the use of their Skins which are now good, one man Gibson wounded a verry large *brown bear*, too late this evening to prosue him. We passed two creeks in a bend to the Lar^{d} Side neither [of] them had any water,

Course & Distance 13th of May 1805

	miles	
S. 35° W.	1½	along the St^{d} Shore to a point of high timber opposit a bluff, passing the enterence of two creeks on the L.S. neither of which discharge any water at this time. 1st 18. 2^{d} 30 yds wide
S. 50° W.	1	along the St^{d} point opps^{d} a high bluff
N. 75° W.	2	to a point of wood land on the Lar^{d} Side
S. 80° W	2½	along the Lar^{d} Shore to a point of wood land near which we incamped on the Lar^{d} Side
miles	7	

[Lewis:] *Tuesday May 14th 1805.*

Some fog on the river this morning, which is a very rare occurrence; the country much as it was yesterday with this difference that the bottoms are somewhat wider; passed some high black bluffs. saw immence herds of buffaloe today also Elk deer wolves and Antelopes. passed three large creeks one on the Star^{d} and two others on the Lar^{d} side, neither of which had any runing water. Capt Clark walked on shore and killed a very fine buffaloe cow. I felt an inclination to eat some veal and walked on shore and killed a very fine buffaloe calf and a large woolf, much the whitest I had seen, it was quite as white as the wool of the common sheep. one of the party wounded a brown bear very badly, but being alone did not think proper to pursue him. In the evening the men in two of the rear canoes discovered a large brown bear lying in the open grounds about 300 paces from the river, and six of them went out to attack him, all good hunters; they took the advantage of a small eminence which concealed them and got within 40 paces of him unperceived, two of them reserved their fires as had been previously conscerted, the four others fired nearly at the same time and put each his bullet through him, two of the balls passed through the bulk of both lobes of his lungs, in an instant this monster ran at them with open mouth, the two who had reserved their fir[e]s discharged their pieces at him as he came towards them, boath of them struck him, one only slightly and the other fortunately broke his shoulder, this however only retarded his motion for a moment only, the men unable to reload their guns took to flight, the bear pursued and had very nearly overtaken them before they reached the river; two of the party betook themselves to a canoe and the others seperated an[d] concealed themselves among the willows, reloaded their pieces, each discharged his piece at him as they had an opportunity they struck him several times again but the guns served only to direct the bear to them, in this manner he pursued two of them seperately so close that they were obliged to throw aside their guns and pouches and throw themselves into the river altho' the bank was nearly twenty feet perpendicular; so enraged was this anamal that he plunged into the river only a few feet behind the second man he had compelled [to] take refuge in the water, when one of those who still remained on shore shot him through the head and finally killed him; they then took him on shore and butch[er]ed him when they found eight balls had passed through him in different directions; the bear being old the flesh was indifferent, they therefore only took the skin and fleece, the latter made us several gallons of oil; it was after the sun had set before these men come up with us, where we had been halted by an occurrence, which I have now to recappitulate, and which altho' happily passed without ruinous injury, I cannot recollect but with the utmost trepidation and horror; this is the upseting and narrow escape of the white perogue. It happened unfortunately for us this evening that Charbono was at the helm of this Perogue, in stead of Drewyer, who had previously steered her; Charbono cannot swim and is perhaps the most timid waterman in the world; perhaps it was equally unluckey that Capt. C. and myself were both on shore at that moment, a circumstance which rarely happened; and tho' we were on the shore opposite to the perogue, were too far distant to be heard or to do more than remain spectators of her fate; in this perogue were embarked, our papers, Instruments, books medicine, a great part of our merchandize and in short almost every article indispensibly necessary to further the views, or insure the success of the enterprize in which we are now launched to the distance of 2200 miles. surfice it to say, that the Perogue was under sail when a sudon squawl of wind struck her obliquely, and turned her considerably, the steersman allarmed, in stead of puting, her before the wind, lufted her up into it, the wind was so violent that it drew the brace of the squarsail out of the hand of the man who was attending it, and instantly upset the perogue and would have turned her completely topsaturva, had it not have been from the resistance mad[e] by the oarning [awning] against the water; in this situation Capt. C. and myself both fired our guns to attract the attention if possible of the crew and ordered the halyards to be cut and the sail hawled in, but they did not hear us; such was their confusion and consternation at this moment, that they suffered the perogue to lye on her side for half a minute before they took the sail in, the perogue then wrighted but had filled within an inch of the gunwals; Charbono still crying to his god for mercy, had not yet recollected the rudder, nor could the repeated orders of the Bowsman, Cruzat, bring him to his recollection untill he threatend to shoot him instantly if he did not take hold of the rudder and do his duty, the waves by this time were runing very high, but the fortitude resolution and good conduct of Cruzat saved her; he ordered 2 of the men to throw out the water with some kettles that fortunately were convenient, while himself and two others rowed her as[h]ore, where she arrived scarcely above the water; we now took every article out of her and lay them to drane as well as we could for the evening, baled out the canoe and secured her. there were two other men beside Charbono on board who could not swim, and who of course must also have perished had the perogue gone to the bottom. while the perogue lay on her side, finding I could not be heard, I for a moment forgot my own situation, and involluntarily droped my gun, threw aside my shot pouch and was in the act of unbuttoning my coat, before I recollected the folly of the attempt I was about to make; which was to throw myself into the river and inde[a]vour to swim to the perogue; the perogue was three hundred yards distant the waves so high that a perogue could scarcely live in any situation, the water excessively could, and the stream rappid; had I undertaken this project therefore, there was a hundred to one but what I should have paid the forfit of my life for the madness of my project, but this had the perogue been lost, I should have valued but little. After having all matters arranged for the evening as well as the nature of circumstances would permit, we thought it a proper occasion to console ourselves and cheer the sperits of our men and accordingly took a drink of grog and gave each man a gill of sperits.

Courses and distances of May 14th 1805.

S. 55° W.	Along the Stard. side, water swift	1.
S. 35. W.	Along the Lard. side, opposite the lower point of an Island in a bend on Stard.	½
S. 20° W.	Along the Lard. side passing the head of an Island opposite to which a large creek falls in on the Stard. side, or *Gibson's Creek*	½
S. 12° E.	to a point of timber on the Stard. side opposite to a high hill on Lard.	3.
S. 20° W.	to a point of timbered land on the Stard. side, a bluff point of rocks on Lard. passing a creek on Lard. called Stick Lodge C.	2 ½
S. 80° W.	to a point of timbered land on the Lard. passing a point of woodland Stard. at 1.M.	3
S. 85° W.	to a point of timbered land on the Lard. passing a large dry creek Lard. the Brown bear defeat.	2 ½
S. 62° W.	to a point of woodland on the Stard. side at which place our perogue had very nearly been lost	3½
	Miles	16 ½

[Clark:] *14th of May Tuesday 1805*

A verry clear cold morning a white frost & some fog on the river the Thermomr. stood at 32 above 0, wind from the

S.W. we proceeded on verry well untill about 6 oClock a squawl of wind Struck our Sale broad side and turned the perogue nearly over, and in this Situation the Perogue remained untill the Sale was cut down in which time she nearly filed with water. the articles which floated out was nearly all caught by the Squar who was in the rear. This accident had like to have cost us deerly; for in this perogue were embarked our papers, Instruments, books, medicine, a great proportion of our merchandize, and in short almost every article indispensibly necessary to further the views, an insure the success of the enterprize in which, we are now launched to the distance of 2,200 miles. it happened unfortunately that Cap^t Lewis and myself were both on shore at the time of this occurrence, a circumstance which seldom took place; and tho' we were on the shore opposit to the perogue were too far distant to be heard or do more than remain spectators of her fate; we discharged our guns with the hope of attracting the attention of the crew and ordered the sail to be taken in but such was their consternation and confusion at the instant that they did not hear us. when however they at length took in the sail and the perogue wrighted; the boatman Cruzatte by repeated threats so far brought Charbono the stersman to his recollection that he did his duty while two hands bailed the perogue and Cruzatte and two others rowed her on shore were she arrived scarcely above the water. we owe the preservation of the perogue to the resolution and fortitude of Cruzatte.[1] the countrey like that of yesterday, passed a Small Island and the enterence of 3 large Creeks, one on the Star^d & the other 2 on the Lar^d Side, nether of them had any running water at this time. Six good hunters of the party fired at a Brown or Yellow *Bear* several times before they killed him, & indeed he had like to have defeated the whole party, he pursued them seperately as they fired on him, and was near catching several of them one he pursued into the river, this bear was large & fat would way about 500^{lbs}; I killed a Buffalow, & Cap^t Lewis a Calf & a wolf this evening

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[1] All after the word "deerly," to this point, is in Lewis's handwriting. — Ed.

Course & Distance May 14th 1805

	mile	
S. 55° W.	1	on the Lard Side swift water
S. 35° W	½	allong the Lard Side opsd the lower point of an Isd in a bind to Std Side.
S. 20° W.	½	allong the Lard Side passed the hd of the Isd opsd to which a large creek falls in on the Std Side. Gibson Creek
S. 12° E.	3	to a point of timber on the Std Side high hills on the Lard Side
S. 20° W	2½	to a point of timbered land on the Std Side, a bluff on Lard Side
S. 80° W	3	to a point of timbered land on the Lard Side, passd a point of wood land on the Std Side at 1 mile
S. 85° W	2½	to a point of timbered land on Lard sd Passg Yellow Bear Defeat creek 40 yds wide
S. 62° W	3½	to a point of wood land on the Stard Side, at which place one perogue like to have been lost & we
	16½	camped

[Lewis:] *Wednesday May 15th*

as soon as a slight shower of rain passed over this morning, we spread the articles to dry which had got wet yesterday in the white perogue; tho' the day proved so cloudy and damp that they received but little benifit from the sun or air; we were inabled to put them in such a state as to prevent their sustaining further injury. our hunters killed several deer, and saw three bear one of which they wounded.

[Clark:] *May 15th Wednesday* 1805

Our medisons, Instruments, merchandize, clothes provisions &c. &c. which was nearly all wet we had put out to air and dry, the day being cloudy & rainey those articles dried but little to day. our hunters killed several deer &c. and saw three Bear one of which they wounded &c.

We see Buffalow on the banks dead, others floating down dead, and others mired every day, those buffalow either drown in swiming the river or brake thro' the ice

[Lewis:] *Thursday May 16th.*

The morning was fair and the day proved favorable to our operations; by 4 oClock in the evening our Instruments, Medicine, merchandize provision &c, were perfectly dryed, repacked and put on board the perogue. the loss we sustained was not so great as we had at first apprehended; our medicine sustained the greatest injury, several articles of which were intirely spoiled, and many others considerably injured, the ballance of our losses consisted of some gardin seeds, a small quantity of gunpowder, and a few culinary articles which fell overboard and sunk. the Indian woman to whom I ascribe equal fortitude and resolution, with any person onboard at the time of the accedent, caught and preserved most of the light articles which were washed overboard. all matters being now arranged for our departure we lost no time in seting out; proceeded on tolerably well about seven miles and encamped on the Star^d. side. in the early part of the day two of our men fired on a panther, a little below our encampment, and wounded it; they informed us that it was very large, had just killed a deer partly devoured it, and in the act of concealing the ballance as they discovered him. we caught two Antelopes at our encampment in attempting to swim the river; these anamals are but lean as yet, and of course not very pleasant food. I walked on shore this evening and killed a buffaloe cow and calf, we found the calf most excellent veal. the country on either side of the river is broken and hills much higher than usual; the bottoms now become narrow and the timber more scant; some scattering pine and cedar on the steep declivities of the hills. this morning a white bear toar Labuiche's coat which he had left in the plains.

Courses and distances May 16th.

S. 80°. W.	to a point of woodland on the Lar^d. side passing a low bluff on Star^d	2½
S. 70°. W.	to a point of woodland on Star^d. near which we encamped for the night	4½
	Miles.	7.

Point of observation N^{o}. 19. May 16th. 1805.

at our encampment of this morning on the Star^{d}. side which we called Panther camp observed Meridian Altitude of ⊙'s L. L. with Octant by the back observation 62°. 3'. – ".

Latitude deduced from this observation. [blank space in MS.]

[Clark:] *May 16th. Thursday 1805*

a fair morning our articles all out to Dry at 4 oClock we had every thing that was saved dry and on bord, our loss is some medison, Powder, Seeds, & Several articles which sunk, and maney Spoiled had a med^{n} altitude which gave for Lat^{d} ° ' " " N.[1] two of our men fired at a *panther* a little below our camp, this animale they say was large, had caught a Deer & eate it half & buried the ballance. a fine antilope Swam the river near our camp two of them were cought by the party in the river. at half past 4 oClock we set out and proceeded on verry well [blank space in MS.] miles and incamped on the St^{d}. Side the countrey as before hilley & broken verry small propotion of timber in the points, some little pine & Ceader in the hills

Course & Distance May 16th.

S. 80°. W	2½	miles to a point of wood land on the Lar^{d} Side passing a low bluff on the St^{d} Side
S. 70°. W	4½	miles to a wood point on the Star^{d}. Side
	7	

Buffalow & Deer is yet plenty on the river in the small timbered bottoms Cap^{t} Lewis walked out on the St^{d}. Side and killed a cow & calf the calf was verry fine

[Lewis:] *Friday May 17th.*

Set out at an early hour, and proceeded on very well; we employed the toe line the greater part of the day; the banks were firm and shore boald which favoured the uce of the cord.

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[1] Figures omitted in MS. — Ed.

I find this method of asscending the river, when the shore is such as will permit it, the safest and most expeditious mode of traveling, except with sails in a steady and favourable breze. The country rugged, the hills high, their summits and sides partially covered with pine and cedar, and the river on either side washing their bases.[1] it is somewhat singular that the lower part of these hills appear to be formed of a dark rich loam while the upper region about 150 feet is formed of a whiteish brown sand, so hard in many parts as to resemble stone; but little rock or stone of any kind to be seen in these hills. the river is much narrower than usual, the bed from 200 to 300 yards only and possessing a much larger proportion of gravel than usual. a few scattering cottonwood trees are the only timber near the river; the sandbars, and with them the willow points have almost entirely disappeared. greater appearance than usual of the saline incrustations of the banks and river hills. we passed two creeks, the one on Star^d side, and the other just below our camp on the Lar^d side; each of these creeks afford a small quantity of runing water, of a brackish tast[e]. the great number of large beds of streams perfectly dry which we daily pass indicate a country but badly watered, which I fear is the case with the country through which we have been passing for the last fifteen or twenty days. Capt. Clark walked on shore this evening and killed an Elk; buffaloe are not so abundant as they were some days past. the party with me killed a female brown bear, she was but meagre, and appeared to have suckled young very recently. Capt. Clark narrowly escaped being bitten by a rattlesnake in the course of his walk, the party killed one this evening at our encampment, which he informed me was similar to that he had seen; this snake is smaller than those common to the middle Atlantic States, being about 2 feet 6 inches long;[2] it is of a yellowish brown colour on the back and sides, variagated with one row of oval spots of a dark brown colour lying transversely over the back from the neck to the tail, and two other rows of small circular spots of the same colour which garnis the sides along the edge of the scuta. it's bely contains 176 [s]cuta on the belly and 17 on the tale. Capt Clark informed me that he saw some coal which had been brought down by the water of the last creek we passed; this creek also throws out considerable quantities of Drift-wood, though there is no timber on it which can be perceived from the Missouri; we called this stream rattlesnake creek. Capt Clark saw an Indian fortifyed camp this evening, which appeared to have been recently occupyed, from which we concluded it was probable that it had been formed by a war party of the Menetares who left their vilage in March last with a view to attack the blackfoot Indians in consequence of their having killed some of their principal warriors the previous autumn. we were roused late at night by the Sergt. of the guard, and warned of the danger we were in from a large tree that had taken fire and which leant immediately over our lodge. we had the loge removed, and a few minutes after a large proportion of the top of the tree fell on the place the lodge had stood; had we been a few minutes later we should have been crushed to attoms. the wind blew so hard, that notwithstanding the lodge was fifty paces distant from the fire it sustained considerable injury from the burning coals which were thrown on it; the party were much harrassed also by this fire which communicated to a collection of fallen timber, and could not be extinguished.

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[1] There are some of them, which at a distance resemble ancient steeples. — GASS (p. 123).

[2] The rattlesnake of the West is *Crotalus confluentus*. — ED.

Cou[r]ses and distances, May 17th.

		Miles
S. 70° W.	to a point of woodland on Stard. side.	1.½
S. 75. W.	to a point of woods on Stard. side	2.
W.	along the Stard. point.	1.½
N. 70. W.	to a point of woods on the Lard. side the hills approach the river on each side	2.
S. 80. W.	to a point of timber on the Stard. side oppoite the entrance of a small creek	3.½
N. 82. W.	to a clump of trees on the Lard. side	2.
West.	along the Lard. side to a point opposite to the entrance of a large creek.	1.
S. 70. W.	along the highland on the Lard. side	1.½

S. 50. W.	along the Lar^d side	¼
S. 30. W.	along the Lar^d side	¼
S. 10. W.	along the Lar^d side	¼
South.	along the Lar^d side	¼
S. 15. E.	along the Lar^d side	¼
S. 30. E.	along the Lar^d side	½
S. 35. E.	along the Lar^d side, to the commencement of a bluff in a Lar^d bend.	¼
S. 2. W.	to a point of timber on the Star^d side, opposite to a bluff	½
S. 45. W.	to a point of timber on the Lar^d side.	½
S. 20. E.	to a point of timber on the Star^d side.	¼
South.	along the Star^d point	¾
S. 15. W.	along the Star^d point, passing the entrance of a large creek on Lar^d side.	¼
S. 80. W.	to a point of woodland on Lar^d side, passing a bluff on Lar^d side; here we encamped	1.¼
	Miles	20 ½

[Clark:] *May 17th Friday 1805*

a fine morning wind from the N W. mercury at 60° a o. river falling a little. We set out at an early hour and proceeded on verry well by the assistance of the Toe rope principally, the countrey verry rugged & hills high and the river washing the bace on each side, great appearances of the Salt substance. a fiew cotton trees is the only timber which is scattered in the bottom & the hills contain a fiew Pine & cedar, which is scattered, river much narrower than below from 2 to 300 yards wide, the bottoms muddey & hills rich earth except near their tops. We passed 2 large creeks to day one on the Starb^d Side and the other just below our camp on the Lar^d Side each of those creeks has a little running water near their mouthes which has a brackish taste, I was nearly treading on a small fierce rattle snake different from any I had ever seen &^{c} one man [of] the party killed another of the same kind. I walked on Shore after dinner & killed an Elk. the party in my absence killed a female Brown or Yellow Bear which was meagre the appearances of the Hills & countrey is as before mentioned except a greater appearance of the white appearances of salts or tarter and some coal which has been thrown out by the floods in the last creek. Buffalow & Deer is not plenty to day. *Elk* is yet to be seen in abundance we camped in the upper part of a small timbered bottom on the Lar^{d} Side in which I saw a fortified Indian camp, which I suppose is one of the camps of a *Minetarre* war party of about 15 men, that set out from their village in March last to war against the Blackfoot Indians.

We were roused late at night and warned of the danger of fire from a tree which had cought and leaned over our Lodge, we had the lodge moved soon after the Dry limbs & top of the tree fell in the place the lodge stood, the wind blew hard and the dry wood cought & fire flew in every direction, burnt our Lodge verry much from the coals which fell on it altho at some distance in the plain, the whole party were much disturbed by this fire which could not be extinguished &^{c}

Course & Distance May 17th 1805

S. 70° W	1½	miles to a wooded point on the St^{d} Side
S. 75° W	2	miles to a wood on the Star^{d} Side
West	1½	miles allong the Star^{d} point
N. 70° W.	2	miles to a point of wood on the Lar^{d} Side the hills approach the river on each side
S. 80° W	3½	to a point of timber on the Star^{d} Side opposit the enterence of a small creek on the Lar^{d} Side Brattens Creek
N. 82° W.	2	miles to a fiew trees on the Lar^{d} p^{t}
West	1	mile along the Lar^{d} Side to a point opposit the enterence of a large creek on the Star^{d} Side, but fiew cotton trees in the small bottoms and a fiew scattering pine & cedar on the tops & sides of the hills &^{c} I saw a *Morking bird*
S 70° W.	1½	under the high land on the Lar^{d} Side
S. 50° W.	¼	allong the Larboard Side
S. 30° W.	¼	allong the Lar^{d} Side
S. 10° W.	¼	allong the Lard. Side
South	¼	allong the Lard. Side
S. 15° E.	¼	allong the Lard. Side
S. 30° E.	½	allong the Lard. Side
S. 35° E	¼	allong the Lar^{d} Side to the commencement of a Bluff in a Lar^{d} bend

S. 2° W	½	to a point of timber on the Star^d Side opposit to a Bluff on the Lar^d Side
S. 45° W	½	to a point of timber on the Lar^d Side
S. 20° E.	¼	to a point of timber on the Star^d Side
South	¾	allong the Star^d point
S. 15° W.	¼	allong the Star^d point passed the enterence of a large creek on the Lar^d Side
S. 80° W	1¼	to a point of wood land on the Lar^d Side passing a bluff on the Lar^d Side here we incamped for the night
	20½	

[Lewis:] *Saturday May 18th 1805.*

The wind blew hard this morning from the West. we were enabled to employ our toe line the greater part of the day and therefore proceeded on tolerably well. there are now but few sandbars, the river is narrow and current gentle. the timber consists of a few cottonwood trees along the verge of the river; the willow has in a great measure disappeared. in the latter part of the day the hills widened, the bottoms became larger, and contained more timber. we passed a [*Wisers* — inserted in pencil] creek on the Star^d side about three oclock, which afforded no water;[1] came too and encamped on the Lar^d side opposite to the lower point of a small Island, two miles short of the extremity of the last course of this day. Capt Clark in the course of his walk this evening killed four deer, two of which were the black tailed or mule deer; the skins are now good, they have not yet produced their young. we saw a number of buffaloe, Elk, deer and Antelopes. the saline substance frequently mentioned continues to appear as usual.

Courses and distances 18th of May.

		Miles.
S. 66° W.	to a point of wood on the Star^d side, opposite to a high irregular hill on Lar^d side	.¾
N. 80. W.	along the Star^d side oposite a bluff	.½
N. 45. W.	to a clump of trees on a Lar^d point, opposite a high rugged bluff	1.½
S. 80. W.	to a point of timber on the Lar^d side	1.½

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[1] The run named for Wiser is now Fourchette Creek. — Ed.

S. 60. W.	to a point of timber on the Star^d side oposite a bluff	.½
S. 85° W.	to a point on Lar^d side	2.
S. 60. W.	along the Lar^d shore.	.½
South.	to a point of woodland on the Star^d side oposite a bluff	1.¼
S. 45. W.	along the Star^d point, to the extremity of a sandbar, oposite a bluff.	.½
N. 20. W.	to a point of woodland on the Lar^d side the river making a deep bend to the N.	2.
N. 55. W.	to a large tree in the center of a Star^d bend.	1.
S. 70. W.	to the point of a sandbar on the Lar^d side, passing the entrance of a Creek on Star^d at ½ a mile	1.¼
S. 20. W.	to a point of woodland on the Star^d side	1.½
S. 35. W.	along the Star^d side opposite a bluff	½
N. 85. W.	to a point of woodland Lar^d side the river making a deep bend to N. under a bluff.	2 ¼
S. 60. W.	along the Lar^d point	½
S. 5. W.	to a timbered point on Star^d side, passing a small Island, ¾ of a mile in length, commencing at 1. mile. oposite to the lower point of this island on the Lar^d side we encamped.	3.
	Miles	21.

[Clark:] *May 18th Satturday 1805*

A windey morning wind from the West we proceeded on verry well with the assistance of the Toe Coard, river narrow but fiew Sand bars, & current jentle, but a few cotton Trees contained in the bottoms willow is not common on the bears [bars] as usial some little on the sides of the river is yet to be seen, the after part of the day was cloudy & at about 12 oClock it began to rain and continued moderately for about 1½ hours, not sufficient to wet a man thro' his clothes, this is the first rain since we set out this spring The hills widen and the bottoms contain more timber than for Several days past, we passed a creek (*Wisers*) on the S^{td} Side about 3 oClock and camped on the Lar^d Side opposit the lower point of a handsom little Island near the middle of the river. I walked on shore and killed four Deer, 2 common & 2 mule deer, one of which had 3 fauns, 2 others had

2 each, those deer are fat, & their skins tolerable good, which are now in demand with us for clothes Such as Legins & Mockersons, I saw great numbers of Buffalows & Elk, some of the party shoot & catch beaver every day & night

Course & Distance 18th of May

	miles	
S. 66° W.	¾	to a point of wood on the Stard. Side opposit a high uneavin hill L.S.
N. 80° W.	½	allong the Stard. Side opposit a bluff
N. 45° W.	1½	to a fiew trees on a point on the Lard. Side opposit a rugged bluff
S. 80° W.	1½	to a point of timber on the Lard. Side
S. 60° W.	½	to a point of timber on the Stard Side oppisit to a Bluff on the L.S.
S. 85° W.	2	to a point on the Lard Side
S. 60° W	½	allong the Lard Shore
South	1¼	to a point of wood land on the Std. Side opposit a Bluff
S. 45° W.	½	allong the Stard point to the extremity of a sand bar, opposit a low bluff
N. 20° W.	2	to a point of wood land on the Lard Side the river makeing a deep bend to the North
N. 55° W.	1	to a large tree in the center of the bend on the Stard. Side
S. 70° W.	1¼	to the point of a sand bar on the Lard Side passing the enterence of a Creek Wisers on S.S. at ½ m.
S. 20° W	1½	to a point of wood land on the Stard. Side
S. 35° W.	½	allong the Stard. point opposit a bluff L.S.
N. 85° W	2¼	to a point of wood land Lard Side the river makeing a deep bend to the N. undr a bluff
S. 60° W	½	allong the Lard point.
S. 5° W.	3	to a timbered point on the Stard. Side, passing a small Island ¾ of a mile in length, comeng. at 1 mile. opposit to the lower point of this Island on the Lard Side we camped.
miles	21	

[Lewis:] *Sunday May 19th 1805.*

The last night was disagreeably could; we were unable to set out untill 8 oclock A.M. in consequence of a heavy fogg, which obscured the river in such a manner that we could not see our way; this is the first we have experienced in any thing like so great a degree; there was also a fall of due [dew] last evening, which is the second we have experienced since we have entered this extensive open country. at eight we set out and proceeded as yesterday by means of the cord principally, the hills are high and the country similar to that of yesterday. Capt Clark walked on shore with two of the hunters and killed a brown bear; notwithstanding that it was shot through the heart it ran at it's usual pace near a quarter of a mile before it fell. one of the party wounded a beaver, and my dog as usual swam in to catch it; the beaver bit him through the hind leg and cut the artery; it was with great difficulty that I could stop the blood; I fear it will yet prove fatal to him. on Capt. Clark's return he informed me that he had from the top of one of the adjacent hights, discovered the entrance of a large stream which discharged itself into the Missouri on the Lar^d side distant 6 or seven miles; from the same place he also saw a range of Mountains, bearing W. distant 40 or 50 Miles; they appeared to proceed in a S.S.W. direction; the N.N.E. extremity of these mountains appeared abrupt.[1]

This afternoon the river was croked, rappid and containing more sawyers than we have seen in the same space since we left the entrance of the river Platte. Capt. C. in the course of his walk killed three deer and a beaver, I also walked on shore this evening a few miles and killed an Elk, a buck, and a beaver. the party killed and caught 4 other beaver & 3 deer.

Courses and distances May 19th 1805.

S. 35° W.	To a point of woodland on the Lar^d side opposite to a bluff	1 ¼
South.	To a point of timber on the Star^d side opposite high hills on Lar^d side	1 ½
S. 75° W.	To a point of woodland on Lar^d side opposite to a bluff on Star^d	1.
S. 20° W.	To a willow point on Star^d side the river making a deep bend to the E.	1 ½

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[1] This range is now known as the Little Rocky Mountains. They run nearly east and west along the 48th parallel, almost to the 109th meridian, and rise to a height of 5,000 feet or more. — Ed.

S. 30° E.	Along the Star^d opposite to a bluff	1.
S. 60° E.	To a point of woodland Star^d side opposite to a bluff.	2 ½
West.	Along the Lar^d shore opposite to a bluff	¾
S. 60° W.	Along the Lar^d shore opposite to a bluff	½
S. 15° W.	To a point of woodland on Star^d side opposite to a bluff a deep bend to the South	3.
S. 20° W.	To a point on the Lar^d side.	1 ½
S. 45° W.	To a point of high timber on the Lar^d opposite to a bluff	¾
South.	To a point of willows on the Star^d Si^d	1 ¾
West.	To a point of low willows on the Lar^d side opposite to the lower point of a willow Island S^t Side	1 ½
S. 45° W.	Along the Lar^d point opposite to the upper point of the Island; a bluff on the Star^d side	½
S. 10° E.	Along the Lar^d point opposite to a bluff, under which is a shoal Star^d S., rappid water	¼
N. 45° E.	To the point of a sandbar on the Star^d side passing remarkable strong water.	½
S. 45° E.	To the timber on the Star^d point, opposite to a bluff on Lar^d where we encamped for the night.	½
	Miles	20.¼

The men complain much of sore eyes and imposthumes.

[Clark:] *May 19th Sunday* 1805

a verry cold night, the murckery stood at 38 at 8 oClock this morning, a heavy *dew* which is the 2^d I have seen this spring. The fog (which was the first) was so thick this morning that we could not Set out untill the Sun was about 2 hours up, at which time a small breeze sprung up from the E which cleared off the fog & we proceeded on by means of the Cord The hills are high & rugged the countrey as yesterday. I walked on Shore with two men we killed a white or grey bear; not withstanding that it was Shot through the heart it ran at it's usial pace near a quarter of a mile before it fell. Capt Lewis's dog was badly bitten by a wounded *beaver* and was near bleading to death, after killing the Bear I continued my walk alone, & killed 3 Deer & a Beaver finding that the Perogues were below I assended the highest hill I could see, from the top of which I saw the mouth of *M.*

Shell R & the meanderings of the Missouri for a long distance. I also saw a high mountain in a westerley direction, bearing S.SW. about 40 or 50 miles distant, in the evening the river was verry crooked and much more rapid & containing more sawyers than any which we have passed above the River Platte Capt Lewis walked on Shore this after noon & killed an Elk, Buck & a Beaver, I kiled three Deer at dinner, the hunters killed three other Deer to day several beaver also killed. We camped on the Stard Side in a bottom of small cotton wood

Course & Distance May 19th

	miles	
S. 35° W.	1¼	to a point of wood land on the Lard Side opposit to a Bluff. S.S.
South	1½	to a point of timber on the Stard Side opposit High hills on the Lard Side.
S. 75° W.	1	to a point of wood land on the Lard Side opposit to a Bluff
S. 20° W.	1½	to a willow point on the Std Side the river makeing a deep bend to the E.
S. 30° W.	1	allong the Stard Side opsd a Bluff
S. 60° W	2½	to a point of wood land Stard Side opposit to a Bluff
West	¾	allong the Lard Shore opsd to a bluff
S. 60° W	½	allong the Lard Point opposit to a bluff
S. 15° W.	3	to a point of wood land on the Stard Side opsd a bluff a Deep bend to the South
S. 20° W.	1½	to a point on the Lard Side
S. 45° W.	¾	to a point of high timber on the Ld Side opposit to a bluff
South	1¾	to a point of willows on the Stard Side
West	1½	to a point of low willows on the Lard Side opsd the lower point of a willow Island S.S.
S. 45° W.	½	allong the Lard point, opsd the upper point of the Island, a Bluff on the Std Side
S 10° E.	¼	allong the Lard point opsd to a Bluff, under which is a shoal S.S. rapid water
N. 45° E.	½	to the point of a sand bar on the Stard Side passing swift water
S. 45°	½	to the timber on the Stard point opposit to a Bluff on Lard here we camped for the night.
miles	20¼	

[Lewis:] *Monday May 20th 1805.*

Set out at an early hour as usual, the banks being favourable and water strong we employed the toe rope principally; river narrow and croked; country much as that of yesterday; immence number of the prickley pears in the plains and on the hills. At the distance of 2¼ miles passed the entrance of a large Creek, affording but little water; this stream we named *Blowing Fly Creek*, from the immence quantities of those insects found in this neighbourhood, they infest our meat while roasting or boiling, and we are obliged to brush them off our provision as we eat. At 11. A.M. we arrived at the entrance of a handsome bold river which discharges itself into the Missouri on the Lard side; this stream we take to be that called by the Minnetares the [blank space in MS.[1]] or Muscleshell River; if it be the same, of which I entertain but little doubt, it takes it's rise, by their information in the 1st Chain of the Rocky Mountains at no great distance from the Yellow stone river, from whence in it's course to this place it passes through a high and broken country pretty well timbered, particularly on it's borders, and intersperced with handsome fertile plains and medows. but from the circumstance of the same Indians informing us that we should find a well timbered country in the neighbourhood of it's mouth, I am induced to beleive that the timbered country of which they speak is similar to that we have passed for a day or two, or that in our view above, which consists of nothing more than a few scattering small scrubby pine and dwarf cedar on the summits of some of the highest hills nine tenths of the country being wholy destitute of timber of any kind, covered with a short grass, arromatic herbs and the prickley pear; the river bottom however, so far as we have explored it or 8 M. are well stocked with Cottonwood timber of tollerable size, & lands of excellent quality. We halted at thentrance of the river on the point formed by it's junction with the Missouri determining to spend the day, make the nececsary observations and send out some hunters to explore the country. The Muscle Shell river falls into the Missouri 2270 miles above it's mouth, and is 110 yards in width, it affords much more water than streams of it's width generally do below, it's courant is by no means rappid, and from appearances it might be navigated with canoes a considerable distance; it's bed is coarse sand and gravel principally with an occasion[al] mixture of black mud; it's banks abbrupt and about 12 feet high yet never appear to overflow; the waters of this river is of a greenish yellow cast, much more transparent than the Missouri, which last is also much more transparent than below but still retains it's whiteish hue and a proportion of it's sedement. the Missouri opposite to this point is deep, gentle in it's courant, and 222 yards in width. The hunters returned this evening and informed us that the country continued much the same in appearance as that we saw where we were or broken, and that about five miles abe (*above*) the mouth of shell river a handsome river of about fifty yards in width discharged itself into the shell river on the Star.d or upper side; this stream we called Sâh-câ-ger we-âh (*Sah ca gah we a*) or bird woman's River,[1] after our interpreter the Snake woman. Shields also found a bould spring or fountain issuing from the foot of the Lar.d hills about 4 miles up the Missouri; a fountain in this plain country is a great novelty; I have not seen a bould fountain of pure water except one since I left the Mandans; there (*are*) a number of small ones but all without exception are impregnated with the salts which abound in this country, and with which I believe the Missoury itself considerably impregnated but to us in the habit of useing it not perceptible; the exception I make is a very fine fountain under the bluffs on the Lar.d side of the missouri and at a distance from the river about five miles below the entrance of the yellowstone River. The sands of the Missouri are not so abundant as they have been for some time past, being confined to the points only; the bed of the river principally mud and still too deep to use the seting pole. Cap.t Clark walked out today and killed two deer and an Elk, the hunters killed 4 deer and elk and a buffaloe. I saw two large Owls with remarkable long feathers on the sides of the head which resembled ears; I take them to be the large hooting Owl tho: they are somewhat larger and their colours brighter than those common to the U. States.

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[1] Clark gives the name elsewhere as Mahtush-azhah. — Ed.

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[1] At present called Crooked Creek. — ED.

Courses and distances of May 20th 1805.

South-	Along the Stard side to the upper part of a bluff (bad water)	½
S. 70° E.	to a sand point on the Stard side	1.
S. 20° W.	to some timber on a Stard point	½
S. 10° E.	to the entrance of a large creek on Lard 25 yds wide, called blowing Fly Ck	¼
South.	to a point of timber on the Lard side opposite to a bluff on Stard side	1 ¼
S. 30. E.	to a willow point on the Stard side opposite to a bluff on Lard side	1 ¼
South.	Along the Stard point opposite to a bluff	¼
West.	to a point of woodland on the Lard Sd just below which Muscle shell R. discharges itself on the Lard 2270 M. up	2.
	Miles.	7.

Point of Observation No. 20.

On the Lard shore opposite to the extremity of the 5th course of this day, observed time and distance of ⊙'s and ☽'s nearest limbs, with Sextant, the ⊙ East.

Mean of a set of 12 observations

	Time	Distance	Longitude deduced.–
	h m s	° ' "	° ' "
A.M.	9. 44. [illegible]8	103. 3. 14.	[blank space in MS.]

Point of Observation No. 21.

On the point of land formed by the junction of the Missouri and Muscle-Shell river observed Equal Altitudes of ⊙, with Sextant.

	h m s			
A.M.	9. 53. 31.	P.M.	lost	Altd of Sextant at the time of Obst 81° 58' 15"
	". 55. 6.		4. 40. 33.	
	". 56. 44.		4. 42. 10.	

h m s

Chronometer too [blank space in MS.] on Mean time [blank space in MS.]

	°	′	
Observed Meridian Alt^d of ⊙'s L. L. with Octant by the back observation . . .	59.	50	
	°	′	″
Latitude deduced from this Observation	47.	00.	24.6

Observed also magnetic Azimuth of ⊙'s Center.

Azimuth by Circumferenter	(Time by (Chronometer	Altitude by Sextant.
	h m s	° ′ ″
1st S. 85. W.	A.M. 6.14.35.	50.
2^{ed} S. 82. W.	" 6.24.36	46.37.30.
3rd S. 80. W.	" 6.34.42.	43.15.30.

[Clark:] *May 20th Monday 1805*

a fine morning wind from the N E. river falling a little we set out at 7 oClock and proceeded on verry well as usial by the assistance of the cord passed some verry swift water, river narrow and crooked, at 11 oClock arrived at the mouth of *Shell* river on the Lar^d Side and formed a camp for the present, haveing passed a large creek about 4 miles below on the L^d Side which we call Blowing fly Creek from the emence quantities of those insects which geather on our meat in such numbers that we are oblige to brush them off what we eate. *Muscle Shell* River falls in on Lar^d Side 2270 miles up contains a greater perportion of water than Rivers of its size below, I measured it and find it to be 110 yards wide, the water of a Greenish Yellow Colour, and appers to be navagable for Small craft. The *Minetarres* inform us that this river heads in the 1st of the rockey Mountains & passes through a broken Countrey. its head at no great distance from the Yellow Stone River The Countrey about this river as described yesterday

we took the Meredian altitude 59°. 50′. 0″. back observation and found the Lat^d to be 47°. 0′. 24″.

Observed time & Distance of Sun & Moons nearest limbs the Sun East.

	Time h m s	Distance
A M.	9 39 17	103° 5′– 15
	" 40 26–	103 4 45
	" 41 17	" 4 15
	" 42 45	" 4 0
	" 44 0	" 3 30
	" 45 2	" 3 15
	" 45 56	" 3 0
	" 46 51	" 2 0
	" 47 53	" 2 0
	" 48 57	" 1 45
	" 50 22	" 1 30

Cronomoter too fast mean time

h m s[1]

observed Equal altitudes with Sextent

	H m s	
A M.	9 53 31	
	" 55 6	
	" 56 44	altitude produced from this observation is 81° 58′ 15″
P M	" " "	
	4 40 33	
	4 42 10	

Took the Magnetick azmoth of the Sun

	Cours	Time h m s	Distance
P M.	S 85° W	6 14 35	50° 00′ 00″
	S 83° W	6 19 31	48 20 15
	S 82° W	6 24 38	46 37 30
	S 80° W	6 34 42	43 15 30

The Missouri at the mouth of Shell River is 222 yards wide with a smoth current the Missouri water is not so muddey as below, but retains nearly its usial cholour, and the sand principally confined to the points I killed two Deer & an Elk, the hunters killed an Elk & several deer mearly for their skins to make Leagins. Sent men out in every derection, the Countrey generally verry broken some leavel plains up the *Shell* river. The bottoms of the *Shell* river is well timbered as also a small river which falls into that river on the upper Side 5 miles above its mouth. The hills on the Lar^{d} contain scattering Pine & cedar

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[1] Figures are omitted in MS. — Ed.

Course & Distance May 20th 1805

	mile	
South	½	allong the Star^{d} Side to the upper part of a Bluff (bad water.
S. 70° E	1	to sand point on the Star^{d} Sid[e]
S. 20° W	½	to the timber on the Star^{d} point
S. 10° E	¼	to the enterence of a large creek Lar^{d} Side
South	1¼	to the point of timber on the Lar^{d} Side opposit a Bluff S.S.
S. 30° E	1¼	to a willow point on the Star^{d} Side opposit a bluff on the Lar^{d} Side
South	¼	allong the St^{d} point ops^{d} a bluff
West	2	to a point of wood land on the Lar^{d} Side below which the mouth of *Shell* river falls in on the Lar^{d} Side
miles	7	2270 up

[Lewis:] *Tuesday May 21st 1805.*

A delightfull morning set out at an early hour and proceeded on very well, imployed the chord principally; the shores are abbrupt and bould and composed of a black and yellow clay; see no extensive collection of pure sand, the bars are composed [of] black mud and a small poportion of fine sand; the courant still pretty strong. the Missouri in it's course downward makes a suddon and extensive bend to receive the Muscle shell river, the point of country thus formed tho' high is still much lower than that surrounding it, thus forming a valley of wavey country which extends itself for a great distance in a Northerly direction; the soil is fertile, produces a fine turf of low grass and some herbs, also immence quantities of the Prickley pear, without a stick of timber of any discription. the country on the South side is high broken and crowned with some scrubby pines and dwarf cedar; the leaf of this pine is much longer than the common pitch or red pine of Virginia, the cone is also longer and slimer, and the imbrications wider and thicker, and the whole frequently covered with rosin. Mineral appearances as usual. the growse or praire hen are now less abundant on the river than they were below; perhaps they betake themselves to the open plains at a distance from the river at this season.

The wind which was moderate all the fore part of the day continued to encrease in the evening, and about dark veered about to N.W. and blew a storm all night, in short we found ourselves so invelloped with clouds of dust and sand that we could neither cook, eat, nor sleep; and were finally compelled to remove our lodge about eight oClock at night to the foot of an adjacent hill where we were covered in some measure from the wind by the hills. several loose articles blown over board and lost. our first station was on a bar on Star^d opposite the lower point of a small Island, which we now called windy Island. the bends of the river are short and suddon, the points covered with some cottonwood, larger willow, or broadleafed willow with an abundance of the wild rose and some small honeysuckle bushes constitute the undergrowth, the redwood is also found in small quantities. Cap^t C walked on shore today and killed 2 Elk; the party killed several deer and a buffaloe Cow.

Courses and distances of May 21st 1805.

West.	To a point of timber on the Star^d side	1.
N. 15° W.	Along the Star^d point opposite to a hill.	¼
N. 10° E.	To a point of timber on the Lar^d side opposite to a bluff on Star. side	2.
N. 30° W.	To the point of a timbered bottom on the Star^d side opposite to a bluff	1 ½
N. 20° E.	To a point of timber on the Lar^d side opposite to a bluff	1 ¼
N. 35° W.	To a point of woodland Lar^d side	¼
N. 80° W.	To a point of woodland Star^d side	1 ¼
N. 45° W.	Along the Star^d shore opposite to a bluff.	¼
N. 15° E.	To a point of woodland Lar^d side	1 ¼
N. 70° W.	To a point of woodland Star^d side	1.
N. 30° W.	Along the Star^d shore	½
N. 10° W.	To the extremity of a willow bar on Lar^d side	1 ¼

N. 60° W.	To a point of woodland Lar^{d} side	1.
S. 70° W.	To the commencement of a bluff in a bend on the Lar^{d} side.	2 ¼
N. 75° W.	To a point of woodland Star^{d} side	1.
N. 30° W.	To a tree in the center of a Star^{d} bend.	2.
S. 80° W.	To the lower point of a timbered bottom on the Star^{d} side, near which we encamp^{d}	2
	Miles	20.

Point of Observation N^{o} 22.

On the Lar^{d} shore at the commencement of the 5th course of this day observed time, and distance of ⊙'s and ☽'s nearest limbs with Sextant, ⊙ East.

Mean of a set of 12 Observations.

	Time	Distance
	h m s	° ′ ″
A.M.	9. 25. 35	91. 45. 19

[Clark:] *May 21st Tuesday 1805.*

A butifull morning, wind from the West, river falling a little, we set out at an early hour and proceed on in the usial way by the assistance of the coard principally, but little use of the oars & less with the poles as the bottoms are muddey, we see no great bodies of pure sand the bars & points are rich mud mixed with fine sand. I walked on Shore Stard Side the river makes a great bend to the South to receve Shell River, the point for many miles out in a Northerley direction is a rich uneaven valley contain[ing] some short grass, and Prickley pears without timber The Countrey on the South Side of the Missouri is high, Soil and mineral appearance as usial, more scattering pine & cedar on the hills, the wind which blew moderatly all the fore part of the day increassed and about Dark shifted to the N W. and stormed all night, Several loose articles were blown over board, our lodge & camp which was on a sand bar on the St^{d} Side & opposite to the lower point of an Island we were obliged to move under the hills, the dust & sand blew in clouds. The bends of the river are short and points covered with cotton wood. undergroth wild rose bushs I killed 2 Elk to day. Several Deer kill^{d} & a Buffalow Cow.

Course Distance May 21st 1805

West	1	mile to a point of timber on the Std Side
N. 15° W	¼	allong the Std point opsd a Hill
N. 10° E	2	to a point of a timber on the Lard Side opposit to a Bluff on the S.S.
N. 30° W.	1½	to the point of a timbered bottom on the Stard Side opsd to a Bluff
N. 20° E.	1¼	to a point of timber on the L. Side opsd to a bluff
N 35° W.	¼	to a point of wood land Lard Side
N. 80° W.	1¼	to a point of wood land Stard Side
N. 45° W.	¼	allong the Stard Shore opposit to a bluff on the L.S.
N. 15° E.	1¼	to a point of wood land Lard Side
N. 70° W.	1	to a point of wood land Stard Side
N. 30° W	½	allong the Stard Shore
N. 10° W.	1¼	to the extremity of a willow bar on the Lard Side
N. 60° W.	1	to a point of wood land Lard Side
S. 70° W.	2¼	to the comencement of a bluff in a bend to the Lard Side
N. 75° W.	1.	to a point of wood land Stard Side
N. 30° W.	2	to a tree in the center of the Std bend
S. 80° W	2	to the lower point of timbered botm on the Stard Side
miles	20	& camped

[Lewis:] *Wednesday May 22d 1805.*

The wind blew so violently this morning that we did not think it prudent to set out untill it had in some measure abated; this did not happen untill 10 A.M. when we proceeded principally by the toe lines. the bottoms somewhat wider than usual, the lands fertile or apparently so tho' the short grass and the scantey proportion of it on the hills would indicate no great fertility. passed Windy Island on Lard at 1.M. 5½ Miles above passed a large Island in a bend on Stard side, and three miles further on the same side passed the entrance of grows[e] Creek 20 Yds wide, affords but little water. this creek we named from seeing a number of the pointed tail praire hen near it's mouth, these are the fi[r]st we have seen in such numbers for some days. I walked on shore this morning the country is not so broken as yesterday tho' still high and roling or wavy; the hills on Lard side possess more pine than usual, some also on the Stard hills. Salts and other mineral appearances as usual. the river continues about the same width or from 200 to 250 y^{ds} wide, fewer sandbars and the courant more gentle and regular; game not so abundant as below the Muscle Shell river. I killed a deer in the course of my walk today. Capt. C. also walked out this evening and took a view of the country from a conspicuous point and found it the same as has been discribed. we have caught but few fish since we left the Mandans, they do not bite freely, what we took were the white cat of 2 to 5 lbs. I presume that fish are scarce in this part of the river. We encamped earlyer this evening than usual in order [to] render the oil of a bear which we killed. I do not believe that the Black bear common to the lower part of this river and the Atlantic States, exists in this quarter; we have neither seen one of them nor their tracks, which would be easily distinguished by it's shortness of tallons when compared with the brown grizly or white bear. I believe that it is the same species or family of bears which assumes all those colours at different ages and seasons of the year.

Courses and distances May 22^{ed} 1805.

S. 30° E.	To the lower point of an Island situated in a bend on Lar^{d} side	¼
West	Along the Star^{d} side passing the upper point of the Island at ¾ of a mile high land L^{d}	3.
S. 70° W.	to a point of woodland on the Star^{d} passing under a bluff on Lar^{d} opposite to an Island in a bend to the Star^{d}	3 ¼
N. 45° W.	To a point of timber on the Lar^{d} side	2.
West.	To the mouth of a creek on the Star^{d} side in a deep bend to the Star^{d}	1.
South.	To a point of high wood on Star^{d} passing a Lar^{d} point at ½.M. and over a willow bar from St^{d}	1 ½
S. 65° W.	Along the Star^{d} point, opposite to a bluff on Lar^{d} covered with pine	¼
West.	To a point of woodland on the Lar^{d} side opposite to a bluff	1.
S. 30. W.	To a willow point on the Star^{d} side	2.
S. 60. W.	To a point of woodland on Star^{d} side, where we encamped;[1] a bluff opposite.	2 ¼
	Miles	16.½

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[1] Just below this camping place the expedition had passed the site of the future Fort Hawley. — Ed.

[Clark :] *May 22nd Wednesday* 1805

The wind continued to blow so violently hard we did not think it prudent to set out untill it luled a little, about 10 oClock we set out the morning cold, passed a small Island in the bend to the Lar^{d} Side, & proceeded on at 5 miles higher passed a Island in a bend to the Star^{d} Side, and a Creek a short distance above on the Star^{d} Side 20 yds wide Cap^{t} Lewis walked out before dinner & killed a Deer, I walked out after dinner and assended a but[te] a few miles [off] to view the countrey, which I found roleing & of a verry rich stickey soil producing but little vegetation of any kind except the prickley pear, but little grass & that verry low. a great deal of scattering *Pine* on the Lard Side & Some few on the Star^{d} S^{d} The mineral productions as described in the proceeding days, game not so abundant as below, the river continues about the same width, fewer Sand bars & current more regular, river falls about an inch a day

We camped on the Star^{d} Side, earlier than we intend[ed] on account of saveing the oil of a bear which the party killed late this afternoon.

Course & Distance May 22nd 1805

	mile	
S. 30° E.	¼	to the lower point of an Island situated in a bend to the Lar^{d} Side
West	3	allong the Star^{d} Side passed the upper point of the Island at ¾. a high land on L.S.
S. 70° W.	3¼	to a point of wood land on the Star^{d} passing under a bluff Lar^{d} opposit an Island in a bend to the Star^{d} Side
N. 45° W.	2	to a point of timber on the Lar^{d} Side
West	1	to the mouth of a creek on the St^{d} Side in a Deep bend to the Star^{d} Side
South	½	to a point of high wood on Star^{d} Side passed Lar^{d} p^{t} & over a willow bar from St^{d}
S. 65° W.	¼	allong the Star^{d} point opposit a Bluff covered with pine on the Lar^{d} Side
West	1	to a point of woodland on the Lar^{d} Side opposit to a bluff
S. 30° W.	2	to a willow point on the Star^{d} Side
S. 60° W.	2¼	to a point of wood land on Star^{d} side opposit a bluff.
	16½	we encamped.

Maney of the Creeks which appear to have no water near ther mouths have streams of running water higher up which rise & waste in the sand or gravel. the water of those creeks are so much impregnated with the salt substance that it cannot be Drank with pleasure.

CHAPTER IX

FROM THE MUSSELSHELL TO MARIA'S RIVER

Lewis's Journal, May 23—June 7, 1805
Clark's Journal, May 23—June 7

[Lewis:] *Thursday May* 23rd 1805.

SET out early this morning, the frost was severe last night, the ice appeared along the edge of the water, water also freized on the oars. at the distance of one mile passed the entrance of a creek 15 y^{ds}. wide on Star^{d} side, this we called Teapot Creek, it affords no water at it's mouth but has runing water at some small distance above, this I beleive to be the case with many of those creeks which we have passed since we entered this hilley country, the water is absorbed by the earth near the river and of course appear dry; they afford but little water at any rate, and that is so strongly impregnated with these salts that it is unfit for uce; all the wild anamals appear fond of this water; I have tryed it by way of experiment & find it moderately pergative, but painfull to the intestens in it's opperation. this creek runs directly towards some low mountains which lye N.W. of it and appear to be about 30 M^{ls}. distant, perhaps it heads in them. This range of mountains appear to be about 70 Miles long runing from E. to W. having their Eastern extremity about 30 M^{ls} distant in a northwardly direction from (*Tea*)pot Island.[1] Also passed two small creeks on Lar^{d} and two others on Star^{d} all inconsiderable and dry at their entrances. just above the entrance of Teapot Creek on the star^{d} there is a large assemblage of the burrows of the Burrowing Squirrel they generally seelect a south or a south Easterly exposure for their residence, and never visit the brooks or river for water; I am astonished how this anamal exists as it dose without water, particularly in a country like this where there is scarcely any rain during ¾ of the year and more rarely any due [dew]; yet we have sometimes found their villages at the distance of five or six miles from any water, and they are never found out of the limits of the ground which their burrows occupy; in the Autumn when the hard frosts commence they close their burrows and do not venture out again untill spring, indeed some of them appear to be yet in winter quarters. passed 3 Islands the two first covered with tall cottonwood timber and the last with willows only. river more rappid, & the country much the same as yesterday. some spruce pine of small size appears among the pitch pine, and reather more rock than usual on the face of the hills. The musquetoes troublesome this evening, a circumstance I did not expect from the temperature of the morning. The Gees begin to lose the feathers of their wings and are unable to fly. Cap^{t} Clark walked on shore and killed 4 deer and an Elk. We killed a large fat brown bear which took the water after being wounded and was carried under some driftwood where he sunk and we were unable to get him. Saw but few buffaloe today but a great number of Elk, deer, some antelopes and 5 bear. The wild rose (*copy for D^{r} Barton*) which is now in blume are very abundant, they appear to differ but little from those common to the Atlantic States, the leaves of the bushes and the bush itself appear to be of somewhat smaller size.[1]

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[1] Another reference to the Little Rocky Mountains. — ED.

Courses and distances of May 23rd 1805.

N. 55° W.	To the entrance of a large creek at a bend, on the Star^{d} side, called Teapot Creek	1.
S. 70° W.	To a point of woodland on the Lar^{d} side ops^{t} bluff	1 ¼
S. 50° W.	To a point of woodland on Star^{d} side	1 ¼
S. 55° W.	Along the star^{d} side opposite to a hill on which there is some pine	1 ½
West.	To a tree in a bend on Star^{d} above a bluff	2.

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[1] This sentence is marked, "Copy for Dr. Barton." Throughout the codices in the possession of the American Philosophical Society, passages of this sort, giving details of botany or zoölogy, are almost always crossed through with red ink, evidently to mark material intended for Barton's use. See Introduction, in vol. i, p. xlv, for account of Barton's connection with the journals. — ED.

S. 45° W.	To the upper point of an Island in a bend on lar^d side, opposite to the center of this Isl^d a small Creek falls in on the Star^d side	2
S. 75° W.	to the main Star^d point, opposite to a bluff Lar^d, just above which a small creek falls in	½
S. 85° W.	to the lower point of a timbered bottom, lying along a bluff in a bend on Star^d side	3
S. 10° W.	to the upper point of the timber in a bend on the Lar^d opposite to a bluff	1 ½
N. 88° W.	To a point of woodland Star^d opposite to a bluff, above which a creek falls in on Lar^d	2.
N. 15° W.	to a point of woodland Lar^d opposite to a bluff.	1 ¼
West.	Along the Lar^d point	¼
S. 60° W.	to a point of timbered land on Star^d side	1.
N. 65° W.	to a point of timbered land passing a small Island in a deep bend to the N. a bluff on Star^d	2.
S. 65° W.	to a point of woodland Star^d opposite to a bluff.	2.
N. 75° W.	to the upper point of a bluff in a bend on Lar^d	¼
N. 30° E.	to the upper point of a small Island in a deep bend to the North E.	1 ½
N. 40° W.	Along the Lar^d shore to the point on Lar^d	1 ½
S. 45° W.	to a point of wood in a bend on Lar^d under a hill, opposite to which we encamped on the Star^d side	1 ¼
	Miles	27.[1]

[Clark:] *May 23rd Thursday 1805*

a severe frost last night, the Thrmot^r stood at the freesing point this morning i. e. 32 a 0. wind S W. the water freeses on the oars Ice on the edge of the river. We set out at an early hour and passed the mouth [of] a creek at 1 mile on the Star^d Side which heads in a mountain N W of its mouth 30 miles, the Countrey on each side is as passed yesterday, passed 2 small creeks on the Stard & 2 on the Lard. Side to day. a mountain which appears to be 60 or 70 miles long bearing E. & W is about 25 miles distant from this river on the Star^d Side Notherley of Pot Island I walked on shore and killed 4 deer & an Elk, & a beaver in the evening we killed a large fat Bear, which we unfortunately lost in the river, after being shot took the water & was carried under a drift passed in course of this day three Islands, two of them covered with tall timber & a 3rd with willows

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[1] Here ends Codex D, so far as the journal of the expedition is concerned. The last page is a continuation of the weather record, etc., in Codex C. — Ed.

The after part of this day was worm & the Musquetors troublesome. Saw but five Buffalow a number of Elk & Deer & 5 bear & 2 antilopes to day. the river beginning to rise, and current more rapid than yesterday, in maney places I saw Spruce on the hills sides Stard this evening

Course & Distance May 23rd

	mile	
N. 55° W.	1	to the enterence of a creek in a bend to the Stard Side called Teapot C. 15 yds wide
S. 70° W.	1¼	to a point of wood land on Lard opsd a bluff
S 50° W.	1¼	to a point of wood land on Stard Side
S. 55° W.	1½	allong the Stard Side a hill opposit on which there is pine
West	2	to a tree in a bend to the Stard above a bluff
S. 45° W	2	to the upper point of an Island in a bend to the Lard Side opposit the center of the Island a small creek falls in on the Stard Side
S. 75° W.	½	to the main Std point opposit to a bluff Lard just above which a small creek falls in
S. 85° W.	3	to the lower point of a timbered bottom allong a bluff in a bend on the Stard Side
S. 10° W.	1½	to the upper point of a timber in a bend on the Lard opposit to a bluff
N. 88° W.	2	to a point of wood land Stard Side opsd a bluff above which a creek falls in Lard
N. 15° W.	1¼	to a point of wood land Lard opsd a bluff
West	¼	allong the Lard point.
S 60° W.	1	to a point of timbered land on the Stard Side
N. 65° W.	2	to a pt of timber Lard passing a Small Island in a deep bend to the N. a bluff on Stard
S. 65° W.	2	to a pt of wood land Stard opsd a bluff
N. 75° W.	¼	to the upper point of a bluff in a bind to the Larboard Side
N. 30° E	1½	to the upper point of a Small Island in a deep bend to the N.E.
N. 40° W.	1½	allong the Lard Shore to the point L.S.
N. 45° W.	1¼	to a point of wood in a bend on Lard under a hill.
	27	opposit to which we encamped on the S.S.

[Lewis:] *Friday May 24th 1805.*[1]

The water standing in the vessels freized during the night ⅛ of an inch thick, ice also appears along the verge of the river. the folage of some of the cottonwood trees have been entirely distroyed by the frost and are again puting forth other buds. the high country in which we are at present and have been passing for some days I take to be a continuation of what the Indians as well as the French Engages call the Black hills. This tract of country so called consists of a collection of high broken and irregular hills and short chain of mountains sometimes 120 miles in width and again becomeing much narrower, but always much higher than the country on either side; they commence about the head of the Kanzas river and to the West of that river near the Arkansas, from whence they take their course a little to the W. of N. W. approaching the rockey Mountains obliquely, passing the river platte above the forks and intercepting the Yellowstone river near the bigbend and passing the Missouri at this place and probably continuing to swell the country as far North as the Saskashawan river. tho' they are lower here than they are discribed to the Sth and may therefore probably terminate before they reach the Suskashawan. the black hills in their course no[r]thwardly appear to approach more nearly to the Rocky Mountains.

We set out at an early hour this morning and proceed on principally by the chord untill about 9 A.M. when a fine breeze sprung up from the S. E. and enabled us th[r]ough the ballance of the day to employ our sails to advantage; we proceed at a pretty good pace notwithstanding the courant of the river was very strong. we passed two large and four small Islands; also several streams on either side; the first of these is a large Creek or small river which disenboged on the Stard side about 1½ miles above our encampment of last evening, it is 30 yards wide and contains some water. the bed is gravley and intermixed with some stone, it takes its rise in the mountains which are situated in a Northwardly direction from its entrance, distant about 30 Miles. the air is so pure in this open country that mountains and other elivated objects appear much nearer than they really are; these mountains do not appear to be further than 15 M. we sent a man up this creek to explore the country he returned late in the evening and informed that he had proceeded ten miles directly towards these mountains and that he did not think himself by any mean[s] half way these mountains are rockey and covered with some scattering pine. This stream we call *North Mountain creek;* the next stream in order is a creek which falls in on Lar^{d}. 2½ miles higher; this is 15 y^{ds}. wide no water; a large village of the burrowing or barking squirrels on the Star^{d}. side opposite it's entrance, hence the name Little dog C^{k}. that being the name by which the French Engages call this anamal. at three miles and at 10 M^{s}. from hence still ascending 2 Small creek[s] fall in on the Star^{d}. side, no water. 5½ miles higher a small river falls in on Lar^{d}. side this we called South Mountain creek as from it's direction it appeared to take it's rise in a range of Mountains lying in a S. Westerly direction from it's entrance distant 50 or 60 M.; this creek is 40 yards wide and discharges a handsome stream of water. it's bed is rockey with gravel and sand, the banks high and country broken it's bottom narrow and no timber. The country high and broken, a considerable portion of black rock and brown sandy rock appear in the faces of the hills; the tops of the hills covered with scattering pine spruce and dwarf cedar; the soil poor and sterile, sandy near the tops of the hills, the whole producing but little grass; the narrow bottoms of the Missouri producing little else but Hysop or southern wood and the pulpy leafed thorn. Cap^{t}. Clark walked on shore this evening and killed a buffaloe cow, we left 2 Canoes and six men to dress the Cow and bring on the meat, they did not overtake us this evening. game is becoming more scarce, particularly beaver, of which we have seen but few for several days the beaver appears to keep pace with the timber as it declines in quantity they also become more scarce.

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[1] The journal is here continued by Codex E., written by Lewis; it covers the period from May 24 to July 16. — Ed.

Courses and distance May 24th. 1805.

S. 60° W.	1½	Mls. To the entrance of N. Mountain Creek in a bend Sd. side.
S. 20° W.	1	To a point of wood Stard. point opposite to a bluff
S. 75° W.	¼.	Along the Stard. point opposite to a bluff
N. 65° W.	1¼.	Along the Stard. side opposite an Island near the Lard. side under a bluff in a bend, a creek falls in above. this bluff opposite to a Village of burrowing Squirrels.
N. 45° W.	¼.	To a point on the Lard. side, passing bad water.
N. 70° W.	2¾.	To a grove of trees at the entrance of a Creek in a bend on Stard. passing a stard. point at 1½ miles.
S. 48° W.	1.	To a point of woodland Lard. side.
S. 50° W.	1½.	To a point of woodland Stard. side, opposite to a low bluff and high piney hill.
West	2½.	To the lower point of the timber in a bend on Lard. passing a Stard. point at 1½ Mls. opposite the Lower point of a small Island.
N. 60° W.	2¼.	To the lower point of the timber in a Stard. bend, passing the Island at ¼ of a Mile, a creek falls in on the Stard. — small and no water.
S. 50° W.	1¼	To a bluff in a Lard. bend passing a small Island
S. 80° W.	1¼	To a point of wood Stard. passed a bluff Lard.
West	3	To the point of a high bluff in a bend on Lard. just below which S. Mtn. Creek falls in on Lard.
N. 70° W.	½	To a Stard. point of wood.
N. 50° W.	1	To a point of woodland Stard. Side.
West	2	To some high timber on the Stard. side oppst. a bluff.
N. 70° W	2.	To a point of woodland Lard. the trees here have no leaves here we encamped for the night.
Miles	24¼	

Point of Observation N. 23. Friday May 24th. 1805.

On the Stard. point mentioned in the sixth course of this day, observed time and distance of ⊙'s and ☽'s nearest limbs ⊙ East. with Sextant.

	Time			Distance			
	h	m	s	°	'	"	
A.M. —	10	39	47	54	38	—	by myself
	"	41	35	"	37	30	

	"	49	23	"	35	—.	by Capt Clark
	"	53	55	"	34	45	
	"	55	23	"	32	15	
	"	56	56.	"	31	—	
A.M	10	59	35	54	30.	45	by Capt Clark
	11.	3.	55	".	28.	15	
	".	5.	4.	".	28.	—	
	".	8.	17	".	27.	15.	By Myself
	"	10.	17.	".	26.	30.	
	".	11.	30	".	25.	45.	

[Clark:] *May 24th Friday 1805*

a cold night the water in the small vestles frosed ⅛ of an inch thick, and the Thermometer stood this morning at the freesing point. We set out at an early hour and proceeded on, at 9 oClock we had a Breeze from the S E which continued all day. this Breeze afforded us good sailing, the river rising fast current verry rapid passed several small Islands, two large & two small creeks. the 1st of those creeks or small rivers 1½ m. above our camp is 30 yards wide and contains water and appears to take its rise in the North Mountains which is Situated in a northeley derection about 20 miles distant. 2½ m. higher a creek falls in on the Lard. Side, opposit a large village of Barking Squirels. 3 miles still higher a small creek falls in on the Stard. 13 miles higher up a small river falls in on the Lard Side which is 40 yards wide and has running water. this stream appears to take its rise in the South Mountains which is Situated in a Southerly derection 30 or 40 miles distant. I walked on the high countrey on the Stard Side found it broken & Dry some pine, spruce & Dwarf cedar on the hill sides, I sent one man 10 miles out he reports a similarity of countrey back I killed a fat buffalow a short distance below the place we dined 2 canoes & 6 men we left to get the meat did not join us this evening. We camped on the Lard point. the cotton wood in this point is beginning to put out a second bud, the first being killed by the frost

Course & Distance May 24th

	miles	
S. 60° W.	1½	to the mouth of N M. [North Mountain] River in a bend Star^{d} Side
S. 20° W.	1	to a point of wood Star^{d} Side ops^{d} a bluff. L.S.
S. 75° W.	¼	allong the Star^{d} point ops^{d} a bluff L.S.
N 65° W.	1¼	allong the Star^{d} Side ops^{d} an Island near the Lar^{d} Side under a bluff in a bend. a creek falls in Lar^{d} ops^{d} a village of barking Squirels S.S.
N. 45° W.	¼	to a point on the Lar^{d} Side, passed bad water
N. 70° W.	2¾	to a grove of trees at the mouth of a creek in a bend to the Stard. passed S^{d} p^{t} at 1½ m.
S. 48° W.	1	to a point of wood land Lar^{d} Side
S. 50° W.	1½	to a point of wood land Star^{d} Side ops^{d} to a low Bluff & high pine hill
West	2½	to the lower point of the timber in a bend on Lar^{d} passing a Star^{d} point at 1½ m. ops^{d} the lower point of a Small Isl^{d}
N. 60° W.	2¼	to the lower point of the timber in a Star^{d} bend, passing the Isl^{d} at ¼ of a m. a small creek falls in on the Star^{d} Side
S. 50° W.	1¼	to a bluff in a Lar^{d} bend passing an Island
S. 80° W.	1¼	to a point of wood Star^{d} pass^{d} a bluff L^{d}
West	3	to the point of a high bluff in a bend on Lard. a large stream falls in just below on Lar^{d} S^{d}
N. 70° W.	½	to a Star^{d} point of wood
N. 50° W.	1	to a point of wood land Star^{d} Side
West	2	to some high timber on the S^{td} Side ops^{d} a bluff
N. 70° W.	2	to a point of wood, trees have no leaves on the Lard Side. where we camped
miles	24¼	

[Lewis:] *Saturday May 25th 1805.*

The Two canoes which we left behind yesterday to bring on the meat did not arrive this morning untill 8 A.M. at which time we set out; the wind being against us we did not proceed with so much ease or expedition as yesterday, we imployed the toe line principally which the banks favored the uce off; the courant [was] strong particularly arround the points against which the courant happened to set, and at the entrances of the little gullies from the hills, these rivulets having brought down considerable quantities of stone and deposited it at their entrances forming partial barriers to the water of the river to the distance of 40 or 50 feet from the shore, arround these the water run with great violence, and compelled us in some instances to double our force in order to get a perorogue or canoe by them. as we ascended the river today I saw several gangs of the bighorned Anamals on the face of the steep bluffs and clifts on the Star^{d} side and sent drewyer to kill one which he accomplished; Cap^{t} Clark and Bratton who were on shore each killed one of these anamals this evening. The head and horns of the male which Drewyer killed weighed 27 lbs. it was somewhat larger than the male of the common deer, the boddy reather thicker deeper and not so long in proportion to it's hight as the common deer; the head and horns are rema[r]kably large compared with the other part of the anamal; the whole form is much more delicate than that of the common goat, and there is a greater disparity in the size of the male and female than between those of either the deer or goat. the eye is large and prominant, the puple of a deep sea green and small, the iris of a silvery colour much like the common sheep; the bone above the eye is remarkably promenant; the head nostrils and division of the upper lip are precisely in form like the sheep. there legs resemble the sheep more than any other animal with which I am acquainted tho' they are more delicately formed, like the sheep they stand forward in the knee and the lower joint of the foreleg is smallest where it joins the knee, the hoof is black & large in proportion, is divided, very open and roundly pointed at the toe, like the sheep, is much hollowed and sharp on the under edge like the Scotch goat, has two small hoofs behind each foot below the ankle as the goat sheep and deer have. the belley, inerside of the legs, and the extremity of the rump and butocks for about two inches arround the but of the tale, are white, as is also the tale exce[p]t just at it's extremety on the upper side which is of a dark brown. the tail is about three inches in length covered with short hair, or at least not longer than that of the boddy; the outher parts of the anamal are of a duskey brown or reather a leadcoloured light brown; the anamal is now sheding it's winter coat which is thick not quite as long as that of the deer and appears to be intermixed with a considerable quantity of a fine fur which lyes next to the skin & conceald by the coarcer hear; the shape of the hair itself is celindric as that of the antelope is but is smaller, shorter, and not compressed or flattened as that of the deer's winter coat is, I believe this anamal only sheds it's hair once a year. it has eight fore teeth in the under jaw and no canine teeth. The horns are la[r]gest at their base, and occupy the crown of the head almost entirely. they are compressed, bent backwards and lunated; the surface swelling into wavy rings which incircleing the horn continue to succeed each other from the base to the extremity and becoming less elivated and more distant as they recede from the head. the horn for about two thirds of it's length is filled with a porus bone which is united with the frontal bone. I obtained the bones of the upper part of the head of this animal at the big bone lick.[1] the horns of the female are small, but are also compressed and bent backwards and incircled with a succession of wavy rings. the horn is of a light brown colour; when dressed it is almost white extreemly transparent and very elastic. this horn is used by the natives in constructing their bows; I have no doubt but it would [make] eligant and usefull hair combs, and might probably answer as many valuable purposes to civilized man, as it dose to the savages, who form their water-cups, spoons and platters of it. the females have already brought forth their young, indeed from the size of the young I suppose that they produce them early in March. they have from one to two at a birth. they feed on grass but principally on the arromatic herbs which grow on the clifts and inaccessable hights which they usually frequent. the places they ge[ne]rally celect to lodg is the cranies or c[r]evices of the rocks in the faces of inacessable precepices, where the wolf nor bear can reach them and where indeed man himself would in many instancies find a similar deficiency; yet these anamals bound from rock to rock and stand apparently in the most careless manner on the sides of precipices of many hundred feet. they are very shye and are quick of both sent and sight.

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[1] In Kentucky. — Ed.

At the distance of two ¾ miles above our encampment of last evening we passed a Creek 20 yard wide affording no running water, we also passed 7 Islands in the course of the day. The Country on either hand is high broken and rockey; the rock is either soft brown sand stone covered with a thin strata of limestone, or a hard black rugged grannite, both usually in horizontal stratas and the Sandy rock overlaying the other. Salts and quarts still appear, some coal and pumice stone also appear; the river bottoms are narrow and afford scarcely any timber. the bars of the river are composed principally of gravel, but little pine on the hills. We saw a Pole-cat this evening it is the first we have seen for many days. buffaloe are now scarce and I begin to fear our harvest of white puddings are at an end.

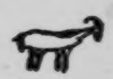
Cou[r]ses and distances May 25th 1805.

S. 50° W.	2¾	to the entrance of a creek 20 yds. wide in a bend on Lard. Side passing a small Island in a deep bend on Lard. Side.
N. 50° W.	1¼	To the Stard. Side of tea Island, which is seperated from the Stard. shore by a narrow channel
N. 35° W.	½	Along the Stard. side passing a sand Island
N. 15° W.	2	To a point of woodland on the Lard. side passing the upper point of Tea Island.
N. 30° W.	2.	to a point of woodland Stard. side, opposite to the lower point of an Island.
N. 25° W.	¼	to a bluff bank in a Stard. bend.
N. 65° W.	¾	to a bluff point on the Stard. opposite the upper point of the Island.
N. 60° W.	4½	to a clump of trees in a Stard. bend under a high bluff passing a Lard. point at 2½ Mls. and a Small Island at 3½ Mls.
N. 80° W.	1	to the point of a high plain on the Stard. side passing an Isld. near the Std. side ¾ of a Ml. in length.
S. 80° W.	2	to the lower point of an untimbered Island situated in the middle of the river, passg a Sd. pt. at 1½ Mls.
S. 60° W.	1	to a pt. on the Lard. side, passing the head of the Ild. at ¾ of a mile and incamped on the Lard. Side.
Miles	18	

[Clark:]

May 25th Satturday 1805

The two canoes left for meat yesterday did not join us untill 8 oClock this morning at which time we set out, the morning cool & pleasent wind a head all day from the S. W. We pass a creek on the Lard Side about 20 yards wide, which does not run, we also passed 7 Islands, I walked on shore and killed a female *Ibi* or big horn animal in my absence Drewyer & Bratten killed two others, this animal is a species peculiar to this upper part of the Missouri, the head and horns of the male which Drewyer killed to day weighed 27 lbs. it was somewhat larger than the mail of the Common Deer; the body reather thicker deeper and not so long in proportion to it's hight as the common Deer; the head and horns of the male are remarkably large compared with the other parts of the animal; the whole form is much more delicate than that of the common goat, and there is a greater disparity in the size of the mail and female than between those of either the deer or goat. the eye is large and prominant, the puple of a deep sea green and small, the iris of a silvery colour much like the common Sheep; the bone above the Eye is remarkably prominant; the head nostrils and division of the upper lip are precisely in form like the sheep. their legs resemble the sheep more than any other animal with which I am acquainted tho' they are more delicately formed, like the sheep they stand foward in the knee and the lower joint of the fore leg is smallest where it joins the knee, the hoof is black and large in perpotion, is divided, very open and roundly pointed at the toe; like the sheep; is much hollowed and Sharp on the under edge like the Scotch goat, has two small Hoofs behind each foot below the ankle as the goat Sheep and Deer have. the belley, iner side of the legs, and the extremity of the rump and buttock's for about two inches ½ around the but of the tail, are white, as is also the tail except just at its extremity on the upper side which is of a dark brown. the tail is about 3 inches in length covered with short hair, or at least not longer than that of the body; the outer part of the animal are of a duskey brown or reather a lead coloured light brown; the



animal is now Sheding its winter coat which is thick not quite as long as that of the Deer and appears to be inter mixt with a considerable quantity of fine fur which lies next to the Skin and concealed by the coarcer hair; the shape of the hair itself is cylindric as that of the Antilope is, but is smaller, shorter and not compressed or flattened as that of the deers winter coat is. I believe this animal only sheds it's hair once a year. it has Eight fore teeth in the under jaw and no canine teeth. The *Horns* are large at their base, and occupy the crown of the head almost entirely, they are compressed, bent backwards and lunated; the surface swelling into wavey rings which incircleing the horn continue to succeed each other from the base to the extremity and becomeing less elivated and more distant as they receed from the head. The horn for about two thirds of its length is filled with a porus bone which is united with the frontal bone (Capt Lewis obtained the bones of the upper part of the head of this animal at the *big Bone Lick* in the State of Kentucky which I saw and find to be the same in every respect with those of the Missouri and the Rockey Mountains) the horns of the *female* are small, but are also compressed and bent backwards and incircled with a succession of wavy rings. the horn is of a light brown colour; when Dressed it is almost white extreamly transparent and very elastic. this horn is used by the natives in constructing their bows; I have no doubt of it's elegance and usefullness in hair combs, and might probably answer as maney valuable purpoces to civilized man, as it does to the native indians, who form their water cups, spoons and platters of it. the females have already brought forth their young, indeed from the size of the young, I suppose that they produce them early in March. they have from one to two at a birth. they feed on grass, but principally on the arramatic herbs which grow on the clifts and inaxcessable hights which they frequent most commonly, and the places they generally collect to lodge is the cranies or c[r]evices of the rocks in the face of inaccessable precepices, where the wolf nor Bear can reach them, and where indeed man himself would in maney instances find a similar deficiency; yet those animals bound from rock to rock and stand apparently in the most careless manner on the Side of precipices of maney hundred feet. they are very shy and quick of both sent and sight. The flesh of this animal is dark and I think inferior to the flesh of the common Deer, and superior to the antilope of the Missouri and the Columbian Plains. In my walk of this day I saw mountt^s on either side of the river at no great distance, those mountains appeared to be detached, and not ranges as laid down by the *Minetarrees*, I also think I saw a range of high Mount^s at a great distance to the S S W. but am not certain as the horozon was not clear enough to view it with certainty. The country on either side is high broken and rockey a dark brown hard rugid stone intermixed with a soft white sand stone. the hills contain coal or cabonated wood as below and some scattering pumestone. the sides of the river is bordered with coars gravel, which in maney places have washed either together or down small brooks and forms bars at some distance in the water, around which the current passes with great valocity. the bottoms between hills and river are narrow and contain scercely any timber. The appearence of salts, and bitumun still continue. we saw a *polecat* to day being the first which we have seen for some time past. The Air of this quarter is pure and helthy. the water of the Missouri will tasted not quite so muddy as it is below, not withstanding the last rains has raised the river a little it is less muddy than it was before the rain.

Course and distance of May 25th 1805

S. 50° W.	2¾	Miles to the enterance of a creek in a bend to the Lar^d Side 20 yards wide passing a small island in a deep bend to Lar^d
N. 50° W.	1¼	to the Star^d Side of tea island which is seperated from the main Star^d Shore by a narrow channel.
N. 35° W.	½	on the Star^d Side passing a Sand Island
N. 15° W.	2	to a point of wood land on the Lar^d Side passing the upper point of tea Island
N. 30° W.	2	to a point of wood land on the Star^d Side opposit to the lower point of an island
N. 25° W.	¼	to a bluff bank in the Star^d Bend

N. 65° W.	¾	to a Bluff point on the Star^d opposit to the upper point of an island.
N. 60° W.	4½	to a clump of trees in a Star^d bend under a high bluff, passing a Lar^d point at 2½ miles. a small island at 3½ miles.
N. 80° W.	1 mile	to a high plain on the Star^d Side passing an island near the Star^d Side ¾ of a M in length
S. 80° W.	2	to the lower point of an open island situated in the middle of the river, passing a Lar^d p^t at 1½ miles on this course.
S. 60° W.	1	to a point on the lar^d Side passing the head of the Island at ¾ of a mile and Encamped on the
	18	Larboard Side.

[Lewis:] *Sunday May 26th 1805.*

Set out at an early hour and proceeded principally by the toe line, using the oars mearly to pass the river in order to take advantage of the shores. scarcely any bottoms to the river; the hills high and juting in on both sides, to the river in many places. the stone tumbleing from these clifts and brought down by the rivulets as mentioned yesterday became more troublesome today. the black rock has given place to a very soft sandstone which appears to be washed away fast by the river, above this and towards the summits of the hills a hard freestone of a brownish yellow colour shews itself in several stratas of unequal thicknesses frequently overlain or incrusted by a very thin strata of limestone which appears to be formed of concreted shells. Capt. Clark walked on shore this morning and ascended to the summit of the river hills he informed me on his return that he had seen mountains on both sides of the river runing nearly parrallel with it and at no great distance; also an irregular range of mountains on lar^d about 50 M^{ls} distant; the extremities of which boar W. and N.W. from his station. he also saw in the course of his walk, some Elk several herds of the Big horn, and the large hare; the latter is common to every part of this open country. scarcely any timber to be seen except the few scattering pine and spruce which crown the high hills, or in some instances grow along their sides. In the after part of the day I also walked out and ascended the river hills which I found sufficiently fortiegueing. on arriving to the summit [of] one of the highest points in the neighbourhood I thought myself well repaid for my labour; as from this point I beheld the Rocky Mountains for the first time, I could only discover a few of the most elivated points above the horizon, the most remarkable of which by my pocket compass I found bore N. 65° W. being a little to the N. of the N.W. extremity of the range of broken mountains seen this morning by Capt. C. these points of the Rocky Mountains were covered with snow and the sun shone on it in such manner as to give me the most plain and satisfactory view. while I viewed these mountains I felt a secret pleasure in finding myself so near the head of the heretofore conceived boundless Missouri; but when I reflected on the difficulties which this snowey barrier would most probably throw in my way to the Pacific, and the sufferings and hardships of myself and party in thim, it in some measure counterballanced the joy I had felt in the first moments in which I gazed on them; but as I have always held it a crime to anticipate evils I will believe it a good comfortable road untill I am compelled to believe differently. saw a few Elk & bighorns at a distance on my return to the river I passed a creek about 20 yds. wide near it's entrance it had a handsome little stream of runing water; in this creek I saw several softshelled Turtles which were the first that have been seen this season; this I believe proceeded reather from the season than from their non existence in the portion of the river from the Mandans hither. on the Stard. shore I killed a fat buffaloe which was very acceptable to us at this moment; the party came up to me late in the evening and encamped for the night on the Lard. side; it was after Dark before we finished butchering the buffaloe, and on my return to camp I trod within [a] few inches of a rattle snake but being in motion I passed before he could probably put himself in a striking attitude and fortunately escaped his bite, I struck about with my espontoon being directed in some measure by his nois untill I killed him. Our hunters had killed two of the Bighorned Anamals since I had left them. we also passed another creek a few miles from Turtle Creek on the Stard. 30 Yds. in width which also had runing water bed rockey. (*we called it Windsor Cr.*) late this evening we passed a very bad rappid which reached quite across the river, (*water deep channel narrow gravel &c on each side*); the party had considerable difficulty in ascending it altho' they doubled their crews and used both the rope and the pole. while they were passing this rappid a female Elk and it's fawn swam down through the waves which ran very high, hence the name of Elk rappids which they instantly gave this place, these are the most considerable rappids which we have yet seen on the missouri and in short the only place where there has appeared to be a suddon decent.[1] opposite to these rappids there is a high bluff and a little above on Lar^{d} a small cottonwood bottom in which we found sufficient timber for our fires and encampment. here I rejoined the party after dark. The appearances of coal in the face of the bluffs, also of birnt hills, pumice stone salts and quarts continue as yesterday. This is truly a desert barren country and I feel myself still more convinced of it's being a continuation of the black hills. we have continued every day to pass more or less old stick lodges[2] of the Indians in the timbered points, there are two even in this little bottom where we lye.

Courses and distances of May 26th 1805.

S. 45° W.	1.	to the point of a plain on the Star^{d} side opposite to a bluff on Lar^{d} side.
N. 70° W.	¼	Along the Star^{d} point opposite to a bluff.
N. 45° W.	¼	Along the Star^{d} point opposite to a bluff.
N. 10° W.	¼	Along the St^{d} do do do do
N. 70° E.	¼	Along the Star^{d} point opposite to a high hill
N. 35° E.	2	to a few trees on a Lar^{d} point.
N. 10° W.	¾	to a point in a bend on Star^{d} side.
N. 75° W.	½	to a point of timber on the Star^{d} side.
N. 66° W.	1.	to a point of timber on the Lar^{d} side.

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[1] Identified by Coues (*L. and C.*, i, p. 329) as Lone Pine Rapids, above Sturgeon Island. — Ed.

[2] Apparently the circle of poles remaining from an old "wickiup" or lodge; most of the tribes on the upper Missouri built them as described by Catlin (*N. Amer. Inds.*, i, p. 43, and accompanying plate); cf. plates 16, 44, and 76, in the atlas illustrating Prince Maximilian's *Voyage*. — Ed.

N. 18° W.	1.	to a gravley point on the Star^d side
N. 12° E.	1.	to the entrance of a creek [*Windsor's*] 30 Y^{ds} wide on Star^d side
West	¾.	to some trees on a Lar^d point.
S. 80. W.	1 ½	to the upper point of some timber in a bend on Lard. Side.
N. 80. W.	½	to an open point on the Lar^d side.
West	2.	to the entrance of a creek [*Turtle*] in a star^d bend, no timber on either side of the river, pine scattered on the hills.
S. 24. W.	2	to a Clift in abend on Lar^d side
West	2.	to a point on the Lar^d side; no timber
S. 60° W.	½	to a bluff point Lar^d opposite to the upper point of a small sand Island.
S. 45° W.	4.	to the point of a small plain Lar^d side, passing high bluffs on either hand.
S. 70° W.	1.	to the point of a high bluff in a Lar^d bend, at which place is a very considerable riffle which we call the Elk rappids.
N. 80° W.	¼.	to the upper point of a small grove of timber on Lar^d side where we encamped for the night.
M^{ls}	22 ¾	

[Clark:] *May 26th Sunday 1805*

We set out early and proceeded as yesterday wind from the S.W. the river enclosed with very high hills on either side. I took one man and walked out this morning, and ascended the high countrey to view the mountains which I thought I saw yesterday, from the first sumit of the hill I could plainly see the Mountains on either side which I saw yesterday and at no great distance from me, those on the Star^d Side is an errigular range, the two extremeties of which bore West and N. West from me. those Mountains on the Lar^d Side appeared to be several detached Knobs or Mountains riseing from a level open countrey, at different distances from me, from South West to South East, on one the most S. Westerly of those Mountains there appeared to be snow. I crossed a Deep holler and assended a part of the plain elivated much higher than where I first viewed the above Mountains; from this point I beheld the Rocky Mountains for the first time with certainty, I could only discover a fiew of the most elivated points above the horizon, the most remarkable of which by my pocket compas I found bore S. 60 W. those points of the rocky Mountain were covered with *Snow* and the Sun Shown on it in such a manner as to give me a most plain and satisfactory view. whilst I viewed those mountains I felt a secret pleasure in finding myself so near the head of the heretofore conceived boundless Missouri; but when I reflected on the difficulties which this snowey barrier would most probably throw in my way to the Pacific Ocean, and the sufferings and hardships of my self and party in them, it in some measure counterballanced the joy I had felt in the first moments in which I gazed on them; but as I have always held it little Short of criminality to anticipate evils I will allow it to be a good comfortable road untill I am compelled to beleive otherwise. The high country in which we are at present and have been passing for some days I take to be a continuation of what the Indians as well as the French Engages call the *Black Hills.* This tract of country so called consists of a collection of high broken and irregular hills and short chains of Mountains, sometimes 100 miles in width and again becoming much narrower, but always much higher than the country on either side; they commence about the head of the Kanzas river and to the west of that river near the Arkansaw river, from whence they take their cource a little to the west of N.W. approaching the Rocky Mountains obliquely passing the river Platte near the forks, and intersepting the River Rochejhone near the big bend of that river, and passing the Missouri at this place, and probably continueing to swell the country as far North as the Saskashawon river, tho' they are lower here than they are discribed to the South, and may therefore termonate before they reach the Saskashawan. the Black hills in their course northerly appear to approach more nearly the Rocky Mountains. I saw a great number of white brant, also the common brown brant, Geese of the common size & kind and a small Species of geese, which differs considerably from the common or Canadian Goose; their necks, head and backs are considerably thicker, shorter and larger than the other in propotion to its size they are also more than a third smaller, and their note more like that of the brant or young goose which has not perfectly acquired his note; in all other respect they are the same in colour habits and the number of feathers in the tail, they frequently also ascoiate with the large Geese when in flocks, but never saw them pared off with the larger or common goose. The white Brant ascoiates in very large flocks, they do not appear to be mated or pared off as if they intended to raise their young in this quarter, I therefore doubt whether they reside here dureing the summer for that purpose. this bird is larger than the common brown brant or ⅔ of the common goose. it is not so long by Six inches from point to point of the wings when extended as the other; the back head and neck are also larger and stronger; their beak, legs and feet are of a redish flesh coloured white. the eye of a moderate size, the puple of a deep sea green encercled with a ring of yellowish brown. it has 16 feathers of equal length in the tail their note differs but little from the common brant. they are of a pure white except the large feathers of the 1st and 2nd joint of the wings which are jut black.

The country which borders the river is high broken and rocky, Generally imbeded with a soft sand stone. higher up the hill the stone is of a brownish yellow hard and gritty those stones wash down from the hills into the river and cause the shore to be rocky &c. which we find troublesom to assend there is scerce any bottom beteewn and the Hills & river and but a fiew trees to be seen on either side except scattering pine on the sides of the emence hills, we passed 2 creeks on the Stard Side both of them had running water in one of those Creek Capt Lewis tells me he saw [a] soft shell Turtle Capt Lewis in his walk killed a fat Buffalow which we were in want of our hunters killed 2 Mountain rams or big horns in the evening late we passed a rapid, which extended quite across the river we assended it by the assistance of a cord & poles on the Lard. Side the Cliffs jut over, the opposit side is a small leavel bottom, we camped a little above in a small Grove of Cotton trees on the Lard. Side in the rapid we saw a Dow

Elk & hir faun, which gave rise to the name of Elk & faun Riffle. We had a few drops of rain at Dark. The Salts coal & Burnt hills & Pumieston Still continue, game scerce. This Countrey may with propriety I think be termed the Deserts of America, as I do not conceive any part can ever be settled, as it is deficent in water, Timber & too steep to be tilled. We pass old Indian lodges in the woody points everry day & 2 at our camp &^{c}.

Course & Distance 26th of May 1805

	mile	
S. 45° W.	1	to the point of a plain on the Star^d side opposit to a Bluff. L.S.
N. 70° W.	¼	allong the Star^d point ops^d a Bluff
N. 45° W.	¼	allong the Star^d point ops^d a Bluff
N. 10° W.	¼	allong the Star^d Point ops^d a Bluff
N. 20° E.	¼	allong the Star^d point ops^d a high hill
N. 35° E.	2	to a fiew trees on a point to Lar^d Side
N. 10° W.	¾	to a point in a bend to the Star^d Side
N. 75° W	½	to a point of timber on the Star^d
N. 66° W.	1	to a point of timber on the Lar^d Side
N. 18° W	1	to graveley point on the Star^d Side
N. 12° E	1	to the mouth of a creek Star^d Side Windsors Creek
West	¾	to some trees on the Lar^d point
S 80° W	1½	to the upper point of some timber in a bend to the Lar^d Side
N 80° W	½	to a open point on the Lar^d Side
West	2	to the mouth of a creek in a bend to the Star^d Side no timber on either side of the river, pine scattered on the hills &^{c}
S. 24° W.	2	to a clift in a bend to the Lar^d Side
West	2	to a point on the Lar^d Side (no timber)
S. 60° W.	½	to a Bluff point Lar^d opposit the upper point of a small sand Island
S 45° W.	4	to the point of a small plain Lar^d passing a high bluff on either side
S. 70° W	1	to the point of a high bluff in Lar^d bend at which place is a verry considerable riffle which we call Elk & faun riffle
N. 80° W.	¼	to the upper part of the timber in a small grove on Lard where we encamped
miles	22¾	

[Lewis:] *Monday May 27th 1805.*

The wind blew so hard this morning that we did not sent [set] out untill 10 A. M. we employed the chord most of the day; the river becomes more rappid and is intercepted by shoals and a greater number of rocky points at the mouths of the little gulies than we experienced yesterday. the bluffs are very high steep rugged, containing considerable quantities of stone and border the river closely on both sides; once perhaps in the course of several miles there will be a few acres of tolerably level land in which two or thre impoverished cottonwood trees will be seen. great quantities of stone also lye in the river and garnish it's borders, which appears to have tumbled from the bluffs where the rains had washed away the sand and clay in which they were imbeded. the bluffs are composed of irregular tho' horizontal stratas of yellow and brown or black clay, brown and yellowish white sand, of soft yellowish white sandstone and a hard dark brown freestone, also of large round kidney formed and irregular seperate masses of a hard black Iron stone, which is imbeded in the Clay and sand. some little pine spruce and dwarf cedar on the hills. some coal or carbonated wood still makes it's appearance in these bluffs, pumicestone and birnt hills it's concommutants also are seen. the salts and quarts are seen but not in such abundance. the country more broken and barren than yesterday if possible. about midday it was very warm to this the high bluffs and narrow channel of the river no doubt contributed greatly. we passed a small untimbered Island this morning on the Lar^d side of the river just above our encampment of last evening. saw a few small herds of the Bighorned anamals and two Elk only, of the last we killed one. the river is generally about 200 Y^{ds} wide, very rappid and has a perceptable fall or declination through it's whole course.

This evening we encamped, for the benefit of wood, near two dead toped cottonwood trees on the Lar^d side; the dead limbs which had fallen from these trees furnished us with a scanty supply only, and more was not to be obtained in the neighbourhood.[1]

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[1] Gass here gives (pp. 129–131) a brief outline of the topography, soil, and products of the region along the Missouri thus far traversed by the expedition. — Ed.

Courses and Distances May 27th 1805.

West	1¾.	Along the Lar^{d} shore to a point on the Lar^{d} side no timber a bluff close on both sides.
S. 80° W.	3¼	to a bluff point on the Star^{d} side, in a Star^{d} bend
S. 50° W.	1.	to a Lar^{d} point.
S. 8° W.	1½	to the point of a bluff Lar^{d} in a Lar^{d} bend; the river making a considerable bend to the S. E.
S. 60° W.	½	to a point on the Lar^{d} side.
S. 26° W.	1½	to a single cottonwood tree on the Lar^{d} point.
S. 55° W.	1.	to a bluff point on the lar^{d} side.
S. 45° W.	3½	to a bluff on the Lar^{d} side, passing a Lar^{d} point at 1. M. & a Star^{d} point at 2½ M^{s} we encamped on Lar^{d} side 1½ M^{s} on this course.
Miles	14	

Point of Observation N^{o} 24.

On the Lar^{d} shore one mile short of the extremity of the second course of this day, observed Mer^{dn} Alt^{d} of ☉^{s} L. L. with Octant by the back Observat^{n} } 57° 27′.

Latitude deduced from this observation [blank space in MS.]

[Clark:] *May 27th Monday 1805.*

The wind blew hard from the S W. which detained us untill about 10 oClock, at which time we set out and proceeded on, passed a small nacked Island on the Lar^{d} Side imediately above the timber in which we camped, The river is verry shoaley and the bad places are verry numerous, i e at the mouth of every Drean the rocks which is a hard dark gritey stone is thrown out some distance in the river which cause a considerable riffle on that side, the hills approach the river verry close on either side, river narrow & no timber except some scattering pine on the hills & hill sides, the salts, coal, burnhills & Pumice Stone &^{c} continue, the hills are Generally Bluffs of various coloured earth most commonly black with different quallities stone intermixed some stratums of soft sand stone, some hard, some a dark brown & yellow hard grit, those stones are loosened by the earths washing from them into the river and ultimately role down into the river, which appears to be crowded with them. This day is verry worm. we only saw a fiew small herds of the big horn animals on the hills, and two Elk one of which we killed, we camped at 2 dead top trees on the Lard Side. The river is Genly about 200 yards wide and current very swift to day and has a verry perceptiable fall in all its course it rises a little

Course & Distance May 27th.

	miles	
West	1¾	allong the Lard Shore to a point on the Lard Sd (no timber) a Bluff opposit on both sides
S. 80° W.	3¼	to a bluff point on the Stard Side in a Stard Bend.
S. 50° W.	1	to a Larboard point.
S. 8° W.	1½	to the point of a Bluff on Lard in a Lard Bend; the river makeing a considerable bend to the S.E.
S. 60° W.	½	to a open point on the Lard Side
S. 26° W.	1½	to a single cotton tree on Stard point
S. 55° W.	1	to a bluff point on the Lard Side
S. 45° W.	3½	to a Bluff on the Lard Side, passed a Lard point at 1 miles, a Stard point at 2½ miles. we camped on Lard Sd 1½ on this course
miles	14	

[Lewis:] *Tuesday May 28th 1805.*

This morning we set forward at an early hour; the weather dark and cloudy, the are [air] smokey, had a few drops of rain; we employed the chord generally to which we also gave the assistance of the pole at the riffles, and rocky points; these are as numerous and many of them much worse than those we passed yesterday; arround those points the water drives with great force, and we are obliged in many insta[n]ces to steer our vessels through the appertures formed by the points of large sharp rocks which reach a few inches above the surface of the water, here s[h]ould our chord give way the bough is instantly drivin outwards by the stream and the vessel thrown with her side on the rocks where she must inevitably overset or perhaps be dashed to peices; our ropes are but slender, all of them except one being made of Elk's skin and much woarn, frequently wet and exposed to the heat of the weather are weak and rotten; they have given way several times in the course of the day but happily at such places that the vessel had room to wheel free of the rocks and therefore escaped injury; with every precaution we can take it is with much labour and infinite risk that we are enabled to get around these points. found a new indian lodge pole today which had been brought down by the stream, it was woarn at one end as if draged by dogs or horses;[1] a football also, and several other articles were found, which have been recently brought down by the courant; these are strong evedences of Indians being on the river above us, and probably at no great distance; the football is such as I have seen among the Minetaries and therefore think it most probable that they are a band of the Minetaries of Fort de Prarie.[2] the river country &c continued much as yesterday untill late in the evening when we arrived at the entrance of a large Creek [which] discharges itself on the Star^{d}. side, is 35 Y^{ds} wide and contains runing water; this we called Thompson's C. (*after one of the party*) here the hills recede from the river on both sides, the bottoms extensive particularly on the Star^{d}. side where the hills are comparitively low and open into three large vallies which extend for a considerable distance in a Northwardly direction; here also the river spreads to more than 3 times it's former width and is filled with a number of small and handsome Islands covered with cottonwood some timber also in the bottoms, the land again fertile. these appearances were quite reviving after the drairy country through which we had been passing. Capt. C. walked on shore in the early part of the day and killed a big horned anamal; he saw a great number of them as well as ourselves in the broken country. at 10 A. M. a few drops of rain again fell and were attended with distant thunder which is the first we have heared since we left the Mandans. This evening we encamped on Star^{d} opposite to the entrance of a small [*Bull*] Creek.[1] I believe the bighorn have their young at a very early season, say early in March, for they appear now to be half grown. One of the party saw a very large bear today but being some distance from the river and no timber to conceal him he did not think proper to fire on him.

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[1] When an Indian camp is broken up, the lodge-poles are utilized as a means of transportation for the children and household goods. The small ends are fastened together with a rude yoke, which is placed over the shoulders of a horse or dog, the poles dragging on the ground; on them are loaded the tent-covers, utensils, etc., on which some of the children often sit. See illustrations of such scenes in Catlin's *N. Amer. Inds.*, i, p. 44; and Eastman's *Aboriginal Portfolio* (Phila., 1853), p. 73. — Ed.

[2] A reference to the Atsina or Fall Indians, roaming in the region south of the Saskatchewan. — Ed.

Courses and distances of May 28th 1805.

South	1.	to a point on Star^{d} side.
S. 35° W.	2.	to the point of a bluff on Star^{d} side.
S. 60° W.	1.	to a point on the Star^{d} side.
N. 70° W.	1.	to a point on the Lar^{d} side
S. 65° W.	2.	to a point on the Star^{d} side
N. 65° W.	1.	to a solitary cottonwood tree on a Lar^{d} point
West	1½	to a do do do on a Star^{d} point
N. 82° W.	1.	to a grove of cottonwood trees on a Lar^{d} point
N. 76° W.	2.	to a tree on a Lar^{d} point.
S. 68° W.	2	to a point on the Star^{d} side, just below the entrance of a large Creek, [*Thompson's*] here the hills recede from the river which also becomes much wider.
West	3½.	to the upper part of a timbered bottom in a bend on the Star^{d} side. passing two small Isln^{ds} and the large creek mentioned in the last course
S. 20° W.	2½	to a bluff point in a bend on Lar^{d} passing two small Islands.
N. 46° W.	1.	to the upper part of the timber in a bottom on the Star^{d} side, at which place we encamped opposite to the entrance of a *small Creek this creek* we called Bull Creek
	21½	Miles (*last day add 1½*)

[Clark:]

May 28th Tuesday 1805

a cloudy morning some fiew drops of rain and verry smokey wind from the S.W. we set out at an early hour, The shoaley places are verry numerous and some bad to get around we have to make use of the cord & Poles, and our tow ropes are all except one of Elkskin, & stretch and sometimes brake which indanger the Perogues or canoe, as it imedeately turns and if any rock should chance to be below, the rapidity of the current would turn her over [if] she should chance to strike the rock, we observe great caution at those places.

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[1] The present Dog Creek, 2½ miles below Judith River. — Ed.

I walked on shore found the countrey ruged and as described yesterday, I saw great numbers of the Big horned animals, one of which I killed their fauns are nearly half grown. one of the Party saw a verry large bear, picked up on the shore a pole which had been made use of by the nativs for lodge poles, & haul'd by dogs it is new and is a certain sign of the Indians being on the river above a foot ball and several other articles are also found to substantiate this oppinion. at 1 oClock we had a few drops of rain and some thunder whic[h] is the first thunder we have had since we set out from Fort Mandan, at 10 miles the hills begin to widen & the river spreds & is crouded with Islands the bottoms contain some scattering cotton wood the Islands also contain timber. passed a Creek of running water on the Star^{d} Side about 35 yards wide and camped imedeately opposit to a small creek on the Lar^{d} Side we call Bull Creek from the circumstance of a Buffalow Bull swiming from the opposit side and comeing out of the river imedeately across one of the Perogues without sinking or injureing any thing in the Perogue, and passing with great violence thro' our camp in the night makeing 3 angles without hurting a man, altho they lay in every direction, and it was very dark

The Creek below 35 yards wide I call Thompsons Creek after a valuable member of our party. this creek contains a Greater preportion of running water than common.

Course & Distance May 28th 1805

	miles	
South	1	to a point on the Star^{d} Side
S. 35° W.	2,	to the point of a Bluff on Star^{d} Side
S. 60° W.	1	to a point on the Star^{d} Side
N. 70° W.	1	to a point on the Lar^{d} Side
S. 65° W.	2	to a point on the Star^{d} Side
N. 65° W.	1	to a single cotton tree on Lar^{d} point

West	1½	to a d^{o} cotton tree on the Star^{d} point
N. 82° W	1	to a grove of cotton trees on Lar^{d} point
N. 76° W.	2	to a tree on the Lar^{d} point
S. 68° W.	2	to a point on the Star^{d} Side, here the Hills separate & river widens
West	3½	to the upper part of a timbered bottom in a bend to the Star^{d} Side, passed two small Islands, & a large Creek St^{d} Side Thompsons creek
S. 20° W.	2½	to a Bluff point in a bend on Lar^{d} passed two small Islands
N. 64° W.	1	to the upper part of the timber in a bottom on the Star^{d} Side at which place we camped. ops^{d} to a Creek L.S.
	21½	

[Lewis:] *Wednesday May 29th 1805*

Last night we were all allarmed by a large buffaloe Bull, which swam over from the opposite shore and coming along side of the white perogue, climbed over it to land, he then allarmed ran up the bank in full speed directly towards the fires, and was within 18 inches of the heads of some of the men who lay sleeping before the centinel could allarm him or make him change his course, still more alarmed, he now took his direction immediately towards our lodge, passing between 4 fires and within a few inches of the heads of one range of the men as they yet lay sleeping, when he came near the tent, my dog saved us by causing him to change his course a second time, which he did by turning a little to the right, and was quickly out of sight, leaving us by this time all in an uproar with our guns in o[u]r hands, enquiring of each other the ca[u]se of the alarm, which after a few moments was explained by the centinel: we were happy to find no one hirt. The next morning we found that the buffaloe in passing the perogue had trodden on a rifle, which belonged to Capt. Clark's black man, who had negligently left her in the perogue, the rifle was much bent, he had also broken the spindle; pivit, and shattered the stock of one of the blunderbushes on board, with this damage I felt well content, happey indeed, that we had sustaned no further injury, it appears that the white perogue, which contains our most valuable stores is attended by some evil gennii. This morning we set out at an early hour and proceded as usual by the Chord. at the distance of 2½ Miles passed a handsome river which discharged itself on the Lar^d side, I walked on shore and acended this river about a mile and a half in order to examine it. I found this river about 100 y^{ds} wide from bank to bank, the water occupying about 75 yar^{ds} the bed was formed of gravel and mud with some sand; it appeared to contain much more water as (*than*) the Muscle-Shell river, was more rappid but equally navigable; there were no large stone or rocks in it's bed to obstruct the navigation; the banks were low yet appeared seldom to overflow; the water of this River is clearer much than any we have met with great abundance of the Argalia or Bighorned animals in the high country through which this river passes. Cap. C. who assended this R. much higher than I did has thought proper to call (*called*) it *Judieths* River.[1] the bottoms of this stream as far as I could see were wider and contained more timber than the Missouri; here I saw some box alder intermixed with the Cottonwood willow; rose bushes and honeysuckle with some red willow constitute the undergrowth. on the Missouri just above the entrance of the *Big Horn* (*Judith*) *River* I counted the remains of the fires of 126 Indian lodges which appeared to be of very recent date perhaps 12 or 15 days. Cap^t Clark also saw a large encamp[m]ent just above the entrance of this river on the Star^d side of reather older date, probably they were the same Indians. The Indian woman with us ex[a]mined the mockersons which we found at these encampments and informed us that they were not of her nation the Snake Indians, but she beleived they were some of the Indians who inhabit the country on this side of [the] Rocky Mountains and North of the Missoury and I think it most probable that they were the Minetaries of Fort de Prarie. At the distance of six ½ M^s from our encampment of last night we passed a very bad rappid to which we gave the name of the Ash rappid from a few trees of that wood growing near them; this is the first ash I have seen for a great distance. at this place the hills again approach the river closely on both sides, and the same seen which we had on the 27th and 28th in the morning again presents itself, and the rocky points and riffles reather more numerous and worse; there was but little timber; salts coal &c still appear. today we passed on the Stard side the remains of a vast many mangled carcases of Buffalow which had been driven over a precipice of 120 feet by the Indians and perished; the water appeared to have washed away a part of this immence pile of slaughter and still their remained the fragments of at least a hundred carcases they created a most horrid stench. in this manner the Indians of the Missouri distroy vast herds of buffaloe at a stroke; for this purpose one of the most active and fleet young men is scelected and disguised in a robe of buffaloe skin, having also the skin of the buffaloe's head with the years and horns fastened on his head in form of a cap, thus caparisoned he places himself at a convenient distance between a herd of buffaloe and a precipice proper for the purpose, which happens in many places on this river for miles together; the other indians now surround the herd on the back and flanks and at a signal agreed on all shew themselves at the same time moving forward towards the buffaloe; the disguised indian or decoy has taken care to place himself sufficiently nigh the buffaloe to be noticed by them when they take to flight and runing before them they follow him in full speede to the precipice, the cattle behind driving those in front over and seeing them go do not look or hesitate about following untill the whole are precipitated down the precepice forming one common mass of dead an[d] mangled carcases: the decoy in the mean time has taken care to secure himself in some cranney or crivice of the clift which he had previously prepared for that purpose. the part of the decoy I am informed is extreamly dangerous, if they are not very fleet runers the buffaloe tread them under foot and crush them to death, and sometimes drive them over the precipice also, where they perish in common with the buffaloe. we saw a great many wolves in the neighbourhood of these mangled carcases they were fat and extreemly gentle, Capt. C. who was on shore killed one of them with his espontoon. just above this place we came too for dinner opposite the entrance of a bold runing river 40 Yds. wide which falls in on Lard. side. this stream we called Slaughter river.[1] it's bottoms are but narrow and contain scarcely any timber. our situation was a narrow bottom on the Stard. possesing some cottonwood. soon after we landed it began to blow & rain, and as there was no appearance of even wood enough to make our fires for some distance above we determined to remain here untill the next morning, and accordingly fixed our camp and gave each man a small dram. notwithstanding the allowance of sperits we issued did not exceed ½ [*jill*] pr. man several of them were considerably effected by it; such is the effects of abstaining for some time from the uce of sperituous liquors; they were all very merry. The hunters killed an Elk this evening, and Capt. C. killed two beaver.

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[1] The Judith River, at first named "Bighorn" by Lewis, was afterwards renamed by Clark in honor of Miss Julia Hancock of Fincastle, Va., who later became his wife. She was but thirteen years of age at this time, and by her friends was nicknamed "Judy." — ED.

Courses and distances of May 29th 1805.

S. 65° W.	2½	To a small willow Island, close under a Stard. point, opposite the entrance of *big horn* (Judith) river on Lard. passing an Island and 2 Sand bars.
S. 80° W.	1.	to the upper part of some scattering timber at the entrance of a small creek on the Stard. above a large old Indian incampment.
S. 50° W.	2.	to a tree in a Stard. bend, opposite to a Lard. point of high land, some timber on Stard. side.
South	1.	to an Ash tree on a Stard. point, at a rappid [*Ash Rap*], a high hill on the Lard. side.
S. 18° W.	2½	to the upper part of some scattering trees in a bend on the Lard. side.
S. 75° W.	2.	to a few trees on a Stard. point, passing a bluff on each side of the river.
N. 70° W.	1.	to a point of wood on the Lard. side.
N. 80° W.	¼	On the Lard. side opposite to a bluff.
S. 70° W.	1.	to an open point on the Stard. side.
West	1.	to a few trees on a Lard. point
S. 72° W.	1¼.	to a few trees on a Stard. point passing a riffle.

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[1] Now Arrow Creek, as named on the maps. — Ed.

S. 85° W.	1½	to a bluff point on the Stard side, opposite to the entrance of a small river [*Slaughter*] on Lard side
West	½	Along the Stard bluff.
N. 85° W.	¼.	to a point of woodland on the Stard side where we
Miles	17.¾	encamped for the night.—

[Clark:] *May 29th Wednesday* 1805

In the last night we were alarmed by a Buffalow which swam from the opposit shore landed opposit the Perogue in which Capt Lewis & my self were in he crossed the perogue, and went with great force up to the fire where several men were sleeping and was [within] 18 inches of their heads, when one man sitting up allarmed him and he turned his course along the range of men as they lay, passing between 4 fires and within a fiew Inches of some of the mens heads as they lay imediately in a direction to our lodge about which several men were lying. our Dog flew out & he changed his course & passed without doeing more damage than bend a rifle & brakeing hir stock and injureying one of the blunder busts in the perogue as he passed through. We set out this morning at the usial hour & proceeded on at 2½ miles passed the mouth of a river [blank space in MS.] yards wide, discharging a great quantity of water, and containing more wood in its bottoms than the Missouri. this river Capt Lewis walked up for a short distance & he saw an old encampment of Indians (I also saw large encampment on the Stard Side at the mouth of a small creek of about 100 Lodges which appeared to be 5 or 6 weeks past, the Indian woman examined the mockersons &c. and told us they were the Indians which resided below the rocky mountains & to the North of this river. that her nation make their mockersons differently at 6½ miles passed a considerable rapid at which place the hills approach near the river on both sides, leaveing a narrow bottom on the Stard Side, (ash rapid) and continue close all day but little timber, I walked on the bank in the evening and saw the remains of a number of buffalow, which had been drove down a clift of rocks I think from appearances that upwards of 100 of those animals must have perished here. Great numbers of wolves were about this place & verry jentle I killed one of them with my spear. The hills above ash rapid contain more rock and coal, and the more rapid points. we came too for Dinner opposit the enterence of a small river which falls in on the Lar^d Side and is about [blank space in MS.] yards wide, has a bold running stream, soon after we came too it began to rain & blow hard, and as we were in a good harbor & small point of woods on the Star^d Side, and no timber for some distance above, induced us to conclude to stay all night. we gave the men a dram, altho verry small it was sufficent to effect several men. one of our hunters killed an elk this evening. I killed 2 beaver on the side of the bank. a table spoon full of water exposed to the air in a Saucer would avaporate in 36 hours when the mercury did not stand higher than the temperate point in the heat of the day.

Course and distance May 29th

	miles	
S. 65° W.	2½	to a small willow Island close under the Star^d point opposit the enterence of a large river on Lar^d Side *Big horn* river 100 y^{ds} wide water 45 y^{ds} passed an Island & 2 sand bars or Is^{ds}
S 80° W.	1	to the upper part of a scattering timber at the mouth of a small creek on the Star^d Side, above a large Ind^n incampment
S. 50° W.	2	to a tree in the Star^d bend opposit the Lar^d point of high land some timber on S.S.
South	1	to a *Ash* tree on the Star^d point, at a *rapid* a high hill on the Lar^d Side
S. 18° W.	2½	to the upper [end] of some scattering trees in a bend to the Lar^d Side
S 75° W.	2	to a fiew trees on a Star^d point a bluff each side
N. 70° W	1	to a point of wood on the Lar^d Side
N. 80° S.	¼	on the Lar^d Side opposit to a bluff
S. 70° W.	1	to an open point on the Star^d Side
West	1	to a fiew trees on the Lar^d point
S. 72° W.	1¼	to a fiew trees on the Star^d point (pass a riffle
S. 85° W	1½	to a Bluff point on the Star^d opposit to the mouth of a small river on the L.S.
West	½	allong the Star^d Bluff
N. 85° W.	¼	to a point of wood land on Star^d Side where we encamped for the night
miles	17¾	

[Lewis:] *Thursday May 30th 1805.*

The rain which commenced last evening continued with little intermission untill 11. this morning when we set out; the high wind which accompanied the rain rendered it impracticable to procede earlyer. more rain has now fallen than we have experienced since the 15th of September last. many circumstances indicate our near approach to a country whos climate differs considerably from that in which we have been for many months. the air of the open country is asstonishingly dry as well as pure. I found by several experiments that a table spoon full of water exposed to the air in a saucer would avaporate in 36 hours when the murcury did not stand higher than the temperate point at the greatest heat of the day; my inkstand so frequently becoming dry put me on this experiment. I also observed the well seasoned case of my sextant shrunk considerably and the joints opened. The water of the river still continues to become clearer and notwithstanding the rain which has fallen it is still much clearer than it was a few days past. this day we proceded with more labour and difficulty than we have yet experienced; in addition to the imbarrasments of the rappid courant, riffles, & rockey point[s] which were as bad if not worse than yesterday, the banks and sides of the bluff were more steep than usual and were now rendered so slippery by the late rain that the men could scarcely walk. the chord is our only dependance for the courant is too rappid to be resisted with the oar and the river too deep in most places for the pole. the earth and stone also falling from these immence high bluffs render it dangerous to pass under them. the wind was also hard and against us. our chords broke several times today but happily without injury to the vessels. we had slight showers of rain through the course of the day, the air was could and rendered more disagreeable by the rain. one of the party ascended the river hills and reported on his return that there was snow intermixed with the rain which fell on the hights; he also informed us that the country was level a little back from the river on both sides. there is now no timber on the hills, an only a few scattering cottonwood, ash, box Alder and willows to be seen along the river. in the course of the day we passed several old encampment of Indians, from the apparent dates of which we conceived that they were the several encampments of a band of about 100 lodges who were progressing slowly up the river; the most recent appeared to have been evacuated about 5 weeks since. these we supposed to be the Minetares or black foot Indians who inhabit the country watered by the Suskashawan and who resort to the establishment of Fort de Prarie.[1] no part of the Missouri from the Minetaries to this place furnishes a perminent residence for any nation yet there is no part of it but what exhibits appearances of being occasionally visited by some nation on hunting excurtions. The Minnetares of the Missoury we know extend their excurtions on the S. (*South*) side as high as the yellowstone river; the Assinniboins still higher on the N. side most probably as high as about Porcupine river and from thence upwards most probably as far as the mountains by the Minetares of Fort de Prarie and the Black Foot Indians who inhabit the S. fork of the Suskashawan. I say the Missouri to the Rocky mountains for I am convinced that it penetrates those mountains for a considerable distance. Two buffaloe killed this evening a little above our encampm^t

Courses and Distances May 30th 1805.

N. 70° W.	¼.	Along the timbered bottom on the Star^d side opposite to a high clift.
N. 50° W.	2.	to a few trees on a Lar^d point.
N. 60° W.	¾	to a broken trunk of a tree on a Star^d point opposite to a high black bluff.
N. 70° W.	1¼.	On the Star^d side to a few willows.
N. 30° W.	1¼	On the Star^d side to the entrance of a run in a bend.
S. 55° W.	2½	to a grove of trees in a bend, on Lar^d side at the entrance of a run, passing a small Island on the Star^d side at 2 M^s, above which we encamped on the Star^d side.
Miles	8.	

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[1] This was the North West Company's fort, on the present site of Edmonton, Alberta. — Ed.

[Clark:] *May 30th Thursday 1805*

The rain commenced yesterday evining, and continued moderately through the course of the night, more rain has now fallin than we have experienced since the 15th of September last, the rain continued this morning, and the wind too high for us to proceed, untill about 11 oClock at which time we set out, and proceeded on with great labour, we were obliged to make use of the Tow rope & the banks were so muddey & slipery that the men could scercely walk not with standing we proceeded on as well as we could wind hard from the N W. in attempting to assend a rapid our toe cord broke & we turned without injurey, those rapids or shoaley points are noumerous and dificuelt, one being at the mouth of every drean Some little rain at times all day one man assended the high countrey and it was raining & snowing on those hills, the day has proved to be raw and cold. Back from the river is tollerably leavel, no timber of any kind on the hills, and only a fiew scattering cotton willow & ash near the river, much hard rock, & rich earth, the small portion of rain which has fallen causes the rich earth as deep as is wet to slip into the river or bottoms &c

We discover in several places old encampments of large bands of Indians, a fiew weeks past and appear to be makeing up the river. Those Indians we believe to be the Blackfoot Inds or Menitares who inhabit the heads of the Saskashowin & north of this place. and trade a little in the *Fort de Prarie* establishments. we camped in a grove of cotton trees on the Stard Side, river rise 1½ In.

Course & Distance May 30th 1805

	mile	
N. 70° W	¼	along the timbered bottom on the Stard point opsd a high clift
N. 50° W.	2	to a fiew trees on a Lard point
N. 60° W.	¾	to a stump on the Stard point opposit a high black bluff
N. 70° W.	1¼	on the Stard Side to a fiew willows
N. 30° W.	1¼	on the Stard Side to the mouth of a run in a bend.
S. 55° W.	2½	to a grove of trees in a bend to the Lard Side at the mouth of a run passed a small Island on the Stard Side at 2 miles above which we encamped on the Stard Side
miles	8	

[Lewis:] *Friday May 31st 1805.* —

This morning we proceeded at an early hour with the two perogues leaving the canoes and crews to bring on the meat of the two buffaloe that were killed last evening and which had not been brought in as it was late and a little off the river. soon after we got under way it began to rain and continued untill meridian when it ceased but still remained cloudy through the ballance of the day. The obstructions of rocky points and riffles still continue as yesterday; at those places the men are compelled to be in the water even to their armpits, and the water is yet very could, and so frequent are those point[s] that they are one fourth of their time in the water, added to this the banks and bluffs along which they are obliged to pass are so slippery and the mud so tenacious that they are unable to wear their mockersons, and in that situation draging the heavy burthen of a canoe and walking acasionally for several hundred yards over the sharp fragments of rocks which tumble from the clifts and garnish the borders of the river; in short their labour is incredibly painfull and great, yet those faithfull fellows bear it without a murmur. The toe rope of the white perogue, the only one indeed of hemp, and that on which we most depended, gave way today at a bad point, the perogue swung and but slightly touched a rock; yet was very near overseting; I fear her evil gennii will play so many pranks with her that she will go to the bottomm some of those days.

Capt. C. walked on shore this morning but found it so excessively bad that he shortly returned. at 12 OC.M we came too for refreshment and gave the men a dram which they received with much cheerfullness, and well deserved.

The hills and river Clifts which we passed today exhibit a most romantic appearance. The bluffs of the river rise to the hight of from 2 to 300 feet and in most places nearly perpendicular; they are formed of remarkable white sandstone which is sufficiently soft to give way readily to the impression of water; two or thre thin horizontal stratas of white freestone, on which the rains or water make no impression, lie imbeded in these clifts of soft stone near the upper part of them; the earth on the top of these Clifts is a dark rich loam, which forming a graduly ascending plain extends back from ½ a mile to a mile where the hills commence and rise abruptly to a hight of about 300 feet more. The water in the course of time in decending from those hills and plains on either side of the river has trickled down the soft sand clifts and woarn it into a thousand grotesque figures, which with the help of a little immagination and an oblique view, at a distance are made to represent eligant ranges of lofty freestone buildings, having their parapets well stocked with statuary; collumns of various sculpture both grooved and plain, are also seen supporting long galleries in front of those buildings; in other places on a much nearer approach and with the help of less immagination we see the remains or ruins of eligant buildings; some collumns standing and almost entire with their pedestals and capitals; others retaining their pedestals but deprived by time or accident of their capitals, some lying prostrate an broken othe[r]s in the form of vast pyramids of connic structure bearing a serees of other pyramids on their tops becoming less as they ascend and finally terminating in a sharp point. nitches and alcoves of various forms and sizes are seen at different hights as we pass. a number of the small martin which build their nests with clay in a globular form attatched to the wall within those nitches, and which were seen hovering about the tops of the collumns did not the less remind us of some of those large stone buildings in the U. States. the thin stratas of hard freestone intermixed with the soft sandstone seems to have aided the water in forming this curious scenery. As we passed on it seemed as if those seens of visionary inchantment would never have and [an] end; for here it is too that nature presents to the view of the traveler vast ranges of walls of tolerable workmanship, so perfect indeed are those walls that I should have thought that nature had attempted here to rival the human art of masonry had I not recollected that she had first began her work. These walls rise to the hight in many places of 100 feet, are perpendicular, with two regular faces and are from one to 12 feet thick, each wall retains the same thickness at top which it possesses at bottom.

The stone of which these walls are formed is black, dence and dureable, and appears to be composed of a large portion of earth intermixed or cemented with a small quantity of sand and a considerable portion of talk or quarts. these stones are almost invariably regular parallelepipeds, of unequal sizes in the walls, but equal in their horizontal ranges, at least as to debth. these are laid regularly in ranges on each other like bricks, each breaking or covering the interstice of the two on which it rests. thus the purpendicular interstices are broken, and the horizontal ones extend entire throughout the whole extent of the walls. These stones seem to bear some proportion to the thickness of the walls in which they are employed, being larger in the thicker walls; the greatest length of the parallelepiped appears to form the thickness of the thinner walls, while two or more are employed to form that of the thicker walls. These walls pass the river in several places, rising from the water's edge much above the sandstone bluffs, which they seem to penetrate; thence continuing their course on a streight line on either side of the river through the gradually ascending plains, over which they tower to the hight of from ten to seventy feet untill they reach the hills, which they finally enter and conceal themselves. these walls sometimes run parallel to each other, with several ranges near each other, and at other times interscecting each other at right angles, having the appearance of the walls of ancient houses or gardens. I walked on shore this evening and examined these walls minutely and preserved a specimine of the stone. I found the face of many of the river hills formed of Clifts of very excellent free stone of a light yellowish brown colour; on these clifts I met with a species of pine which I had never seen, it differs from the pitch-pine in the particular of it's leaf and cone, the first being vastly shorter, and the latter considerably longer and more pointed. I saw near those bluffs the most beautifull fox that I ever beheld, the colours appeared to me to be a fine orrange yellow, white and black; I endevoured to kill this anamal but it discovered me at a considerable distance, and finding that I could get no nearer, I fired on him as he ran, and missed him; he concealed himself under the rocks of the clift; it appeared to me to be about the size of the common red fox of the Atlantic states, or reather smaller than the large fox common to this country; convinced I am that it is a distinct species.[1] The appearance of coal continu[e]s but in small quantities, but litt[l]e appearance of birnt hills or pumice stone. the mineral salts have in some measure abated and no quarts. we saw a great number of the Bighorn some mule deer and a few buffaloe and Elk, no antelopes or common deer. Drewyer who was with me and myself killed two bighorned anamals; the sides of the Clifts where these anamals resort much to lodg, have the peculiar smell of the sheepfolds. the party killed in addition to our hunt 2 buffaloe and an Elk. the river today has been from 150 to 250 y^{ds}. wide but little timber today on the river.

Courses and distances of May 31st 1805.

N. 45° W.	2.	to a few trees in a bend on Star^{d}. side
S. 80° W.	½.	to a few trees on a Star^{d}. point
N. 80° W.	¼	On the Star^{d}. point
N. 60° W.	1 ¾	to the lower part of the timber in a Star^{d}. bend
West	¼	to a few trees on the Star^{d}. side.
N. 78° W.	2.	to some trees on the Star^{d}. side.
West	2.	to a point on the Star^{d}. side.
N. 45° W.	¼.	Along the Star^{d}. point.
N. 30° W.	¼.	Along the Star^{d}. point passing a high wall of black rock on Lar^{d}. rising from the water's edge above the river clifts.
North	1 ½	to a tree in a bend on Star^{d}. opposite to a high open bottom.
N. 42. W.	1.	to a point on the Star^{d}. side
N. 10. E.	¾	to a point on the Lar^{d}. side opposite to a wall of black rock 200 feet high penetrating the bluff
N. 20. W.	2.	to four trees in a bend on Lar^{d}. side
North	3 ½	to the upper part of a timbered bottom on the Star^{d}. side above the entrance of a stone wall creek affording water and 28 Y^{ds}. wide just above the mouth of which we encamped. at 1. M on this course passed a high stone wall on S^{td} 12 feet thick and rising 200 feet.
Miles	18	

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[1] A variety of the common red fox, known as the "cross-fox." — Ed.

[Clark:] *May 31st Friday 1805*[1]

A cloudy morning we dispatched all the canoes to collect the meat of 2 Buffalow killed last night a head and a little off the river, and proceeded on with the perogues at an early hour. I attempted to walk on shore soon found it verry laborious as the mud stuck to my mockersons & was verry slippery. I returned on board. it continued to rain moderately untill about 12 oClock when it ceased, & continued cloudy. the stones on the edge of the river continue to form verry considerable rapids, w^c are troublesom & dificuelt to pass, our toe rope which we are obliged to make use of altogether broke & we were in some danger of turning over in the perogue in which I was, we landed at 12 and refreshed the men with a dram, our men are obliged to undergo great labour and fatigue in assending this part of the Missouri, as they are compelled from the rapidity of the current in many places to walk in the water & on slippery hill sides on the sides of rocks, on Gravel & thro' a stiff mud bear footed, as they cannot keep on mockersons from the stiffness of the mud & decline of the slipery hills sides. The Hills and river clifts of this day exhibit a most romantick appearance on each side of the river is a white soft sand stone bluff which rises to about half the hight of the hills, on the top of this clift is a black earth, in maney places this sand stone appears like antient ruins some like elegant buildings at a distance, some like Towers &c. &c. in maney places of this days march we observe on either side of the river extraodanary walls of a black semented stone which appear to be regularly placed one stone on the other, some of those walls run to the hite of 100 feet, they are from about 1 foot to 12 feet thick and are perpendicular, those walls commence at the waters edge & in some places meet at right angles. those walls appear to continue their course into the sand clifts, the stones which form those walls are of different sizes all squar edged, Great numbers has fallen off from the walls near the river which cause the walls to be of uneaquil hite, in the evening the countrey becomes lower and the bottoms wider, no timber on the uplands, except a few cedar & pine on the clifts a few scattering cotton trees on the points in the river bottoms. The appearance of coal continues Cap^t Lewis walked on shore & observed a species of Pine we had never before seen, with a shorter leaf than common & the bur different, he also collected some of the stones off one of the walls which appears to be a sement of Isin glass [and] black earth we camped on the Star^d Side in a small timbered bottom above the mouth of a Creek on the Star^d Side our hunters killed 2 animals with big horns, 2 Buffalow & an Elk. we saw Great numbers of those big horned animals on the clifts, but fiew Buffalow or Elk, no antelope, a fiew mule deer, saw a fox to day. The river rises a little it is from 150 to 250 y^{ds} wide

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[1] Clark-Voorhis note-book No. 1 has two entries by Clark for this date. We have chosen for publication the later one, as less similar to that of Lewis for the same date. — ED.

Course & Distance May 31st 1805

	miles	
N. 45° W.	2	to a fiew trees in a bend Star^d Side.
S. 80° W.	½	to a fiew trees on the Star^d point
N. 80° W.	¼	on the Star^d point
N. 60° W.	1¾	to the lower part of a timber in a Star^d bend
West	¼	to a fiew trees on the Star^d Side
N. 78° W	2	to some trees on the Star^d Side
West	2	to the point on the Star^d Side
N. 45° W.	¼	on the Star^d point
N. 30° W	¼	on the Star^d point ops^d a high steep black rock riseing from the waters edge
North	1½	to a tree in a bend to the Star^d Side ops^d a high open bottom
N. 42° W.	1	to the point on the Star^d Side
N. 10° E	¾	to a point on the Lar^d Side a high black conical rock of 200 feet high on the St^d S^d
N. 20° W.	2	to 4 trees in a bend to the Lar^d Side
North	3½	to the upper part of a timbered bottom on the Star^d Side above the mouth of Stonewall creek which contains water passed a high stone wall about 200 feet high & 12 feet thick on the St^d Side & encamped at the mouth of the creek S.S. in a thickly timbered bottom of small cotton wood this creek is a bold stream of clear water
miles	18	

[Lewis:] *Saturday June 1st 1805.*

The mor[n]ing was cloudy and a few drops of rain. Set out at an early hour and proceeded as usual by the help of our chords. the river Clifts and bluffs not so high as yesterday and the country becomes more level. a mountain or a part of the N. Mountains appears to approach the river within 8 or 10 Ms bearing N. from our encampment of the last evening. Capt C. who walked on shore today informed me that the river hills were much lower than usual and that from the tops of those hills he had a delightfull view of rich level and extensive plains on both sides of the river; in those plains, which in many places reach the river clifts, he observed large banks of pure sand which appeared to have been d[r]iven by the S. W. winds from the river bluffs and there deposited. the plains are more fertile at some distance from the river than near the bluffs where the surface of the earth is very generally covered with small smothe pebbles which have the appearance of having been woarn by the agitation of the waters in which they were no doubt once immerced. A range of high Mountains appear to the S. W. at a considerable distance covered with snow; they appear to run Westerly. no timber appears on the highlands; but much more than yesterday on the river and Islands. rockey points and shoals less frequent than yesterday but some of them quite as bad when they did occur. the river from 2 to 400 yards wide, courant more gentle and still becoming clearer. game is by no means as abundant as below; we killed one male bighorn and a mule deer today; saw buffalow at a distance in the plains particularly near a small Lake on Lard side about 8 Ms distant. some few drops of rain again fell this evening. We passed Six Islands and encamped on the 7th; they are all small but contain some timber. the wind has been against us all day. I saw the choke cherry the yellow and red courant bushes; the wild rose appears now to be in full bloom as are also the prickley pear which are numerous in these plains. We also saw some Indian Lodges of sticks today which did not appear to have been long evacuated. some coal appea[r]s in the bluffs.

Courses and distances of June 1st 1805.

N. 58° W.	2½	to a Point on the Stard. side.
N. 45° W.	1¼	to a point on the Lard. side
N. 60° W.	1¼	to a point on the Stard. side
N. 50° W.	1½	to a tree on the Lard. side
N. 25° W.	1¼	to a point on the Stard. side
N. 30° W.	¾	Along the Stard. shore to a point of woodland.
N. 20° W.	1.	to a point of timber on the Lard. side oppt. to a bluff
N. 48° W.	¾	to a point of timbered land Stard.
N. 55° W.	1½	to a point of timbered land Lard.
N. 60° W.	1¾	to the point of a bluff in a bend on Stard. oppt. to a small Island.
S. 58° W.	1½	to a point on the Stard. side
S. 60° W.	1.	to the upper point of a small Island on the Std. side passing a Lard. point at ¾ of a mile.
S. 40° W.	¾	to a bluff point in a bend on Lard. side
West	1.	to the centre of a Stard. bend.
South	2½	to a Stard point opposite to a high bluff
S. 20° W.	¾	to a bluff on the Stard. side opposite to an Island.
N. 65° W.	2.	to a small island near a high bluff on Stard., passing two other Islands; the 1st on Lard and 2nd near the extremity of this course. encamped on the 3rd. Island at the termineation of this course.
Miles	23.	

[Clark:]

June 1st Satterday 1805

A cloudy morning we set out at an early hour and proseeded on as usial with the tow rope. The countrey appears to be lower and the clifts not so high or common, a mountain or a part of the north Mountain about 8 or 10 miles N. of this place. I walked on shore to day found the Plains much lower than we have seen them and on the top we behold an extencive plain on both sides, in this plain I observe maney knoles of fine sand which appeared to have blown from the river bluffs and collected at these points Those plains are firtile near the river a great no. of small stone, I observed at some distance to the S W. a high mountain which appears to bear westerly. The cole appears as usial, more cotton trees scattered on the shores & Islands than yesterday. no timber on the high land, the river from 2 to 400 yards wide & current more jentle than yesterday but fiew bad rapid points to day. the wild animals not so plenty as below we only killed a ram & mule Deer to day, we saw Buffalow at a distance in the plains, particularly near a Lake on the Lard Side about 8 miles distant from the river. We passed Six Islands and encamped on the 7th all those Islands are small but contain some timber on them The river riseing a little. Wind to day from the S.W. som fiew drops of rain in the morning and also in the evening, flying clouds all day

Course and Distance June the 1st 1805

	miles	
N. 58° W.	2½	to a point on the Stard Side
N. 45° W.	1¼	to a point on the Lard Side
N. 60° W.	1¼	to a point on the Stard Side
N. 50° W	1½	to a tree on the Lard Side
N. 25° W.	1¼	to a point on the Stard Side
N. 30° W.	¾	allong the Stard Shore to a point of woodland
N. 20° W.	1	to a point of timber on the Lard Side opsd to a bluff on the Stard Side
N. 48° W.	¾	to a point of timbered land Stard Side
N. 55° W.	1½	to a point of timbered land on the Lard Sd
N. 60° W.	1¾	to the point of a bluff in a bend on Stard opposit to a small Island
S. 58° W.	1½	to a point on the Stard Side
S. 60° W.	1	to the upper point of a small Island, on the Stard Side passd Lard pt at ¾ of a m.
S. 40° W.	¾	to a bluff point in a bend to the Lard Side
West	1	to the center of a Stard bend
South	2½	to a Stard point opposit a high bluff
S. 20° W.	¾	to a Bluff on the Stard Side opsd an Isd
N 65° W.	2	to a Small Island near a high bluff on the Stard, passing two other Islands first on the Lard & the 2nd near the extremity of the course, and Encamped on the 3rd Island
miles	23	

Saw several Indian camps made of sticks & bark set up on end and do not appear to be long evacuated. The roses are in full bloom, I observe yellow berries, red berry bushes Great numbers of Wild or choke Cheries, prickley pares are in blossom & in great numbers.

[Lewis:] *Sunday June 2nd 1805.*

The wind blew violently last night and was attended by a slight shower of rain; the morning was fair and we set out at an early hour. imployed the chord as usual the greater part of the day. the courant was strong tho' regular, and the banks afforded us good toeing. the wind was hard and against us yet we proceded with infinitely more ease than the two preceding days. The river bluffs still continue to get lower and the plains leveler and more extensive; the timber on the river increases in quantity; the country in all other rispects much as discribed yesterday. I think we are now completely above the black hills (*see note of May 29*). we had a small shower of rain today but it lasted only a few minutes and was very moderate. Game becomeing more abundant this morning and I thought it best now to loose no time or suffer an opportunity to escape in providing the necessary quantity of Elk's skins to cover my leather boat which I now expect I shall be obliged to use shortly. Accordingly I walked on shore most of the day with some of the hunters for that purpose and killed 6 Elk 2 buffal[o]e 2 Mule deer and a bear, these anamals were all in good order we therefore took as much of the meat as our canoes and perogues could conveniently carry. the bear was very near catching Drewyer; it also pursued Charbono who fired his gun in the air as he ran but fortunately eluded the vigilence of the bear by secreting himself very securely in the bushes untill Drewyer finally killed it by a shot in the head; the (*only*) shot indeed that will conquer the farocity of those tremendious anamals. in the course of the day we passed 9 Islands all of them small and most of them containing some timber. we came too on the Lard. side in a handsome bottom of small cottonwood timber opposite to the entrance of a very considerable river; but it being too late to ex[a]mine these rivers minutely to night we determined to remain here untill the morning, and as the evening was favourable to make some observations.

Courses and distances June 2nd 1805.

N. 85° W.	¾	to a few trees on a Lar^{d} point.
S. 60° W.	¼.	Along the Lar^{d} point opposite to a bluff.
S. 40° W.	½	to some trees in a Star^{d} Bend.
S. 20° E.	1.	to some willows on the Lar^{d} side
S. 30° E.	1.	to a bush on a Star^{d} point opposite to a low bluff
South	¼.	Along the Star^{d} point.
S. 45° W.	½.	to a tree in a Lar^{d} bend
West	2.	to a point on Lar^{d} side opposite to a bluff
S. 68° W.	¼.	Along the Lar^{d} shore oppst an Island.
S. 35° W.	¼.	Along the Lar^{d} shore
S. 25° W.	1.	to the point of a timbered bottom on Lar^{d}.
South	2 ¾.	to a point on Star^{d} oppst a dark bluff, passing three Islands; small.
S. 60° W.	1.	Along the Star^{d} side passing two small Islands on Lar^{d}
N. 80° W.	1 ¾	to a Lar^{d} point opposite to a bluff.
S. 10° W.	1 ½	to the Lower point of an Island near a Star^{d} point.
S. 65° W.	2.	to a point of timber on the Lar^{d} side opposite a bluff the Island and also another small one near the Star^{d} side.
S. 20° W.	½	to the head of an island
South	½	to a Point of timber on the Star^{d} side.
S. 72° W.	¼	to a point between two large rivers one of which is 362 Y^{d} and the 2nd or right hand fork [*Maria's*] is 200 Y^{ds} wide. encamped on the Lar^{d} shore opposite the junction of those rivers.
Miles — 18.		

Point of observation N^{o} 25. June 2nd

On the Lar^{d} side, one mile from the commencement of the 12th course of this day, observed Meridian Alt^{d} of ⊙^{s} L. L. with Octant by the back observation 57° 52′. Latitude deduced from this observation [blank space in MS.]

Point of Observation N^{o} 26.

At our encampment of this evening on the Lar^{d} side of the Missouri. Observed time and distance of ☽^{s} Western limb from Spica ♍., ✱ East, with Sextant.

	Time h m s	Distance		Time h m s	Distance
P.M.	10. 58. 53	53° 56.′ 45″	P.M.	11. 30. 43.	53° 42′ 45″
	11. 3. 33	" 55. 30.		" 33. 46	" 41. 15
	" 5. 52	" . 54. 30.		" . 36. 2	" . 40. 15.
	" 8. 15.	" . 52. 30.		" . 38. 35.	" . 38. 45.
	" . 10. 52.	" . 52. 30.		" . 41. 28.	" . 36. 30.
	" . 13. 16.	" . 50. 45.		" . 43. 16.	" . 36. 15.
	" . 15. 6.	" . 49. 15.		" . 45. 12.	" . 34. 45.
	" . 18. 22.	" . 48. —		" . 47. —	" . 33. —

Point of Observation Nº 27. June 3rd

On the point formed by the junction of Maria's River and the Missouri, Observed equal alt^{ds}. of ⊙ with Sextant.

	h m s		h m s	
A.M.	8. 57. 19	P.M.	5. 42. 39	Alt^{d}. at the time
	". 58. 55.		". 44. 14	of observation.
	Lost by Clouds.		" 45. 48.	65° 12′ —″.

Observed Meridian Alt^{d}. of ⊙'s L. L. with Octant by the back observation	56° 6′
Latitude deduced from this observation	47° 24′ 12″ .8

Observed time and distance of ⊙'s and ☽'s nearest limbs with Sextant ⊙. West.

	Time. h m s	Distance.		Time. h m s	Distance.
P.M.	5. 54. 49.	85° 47′ 30″	P.M.	6. 14. 30	85° 53′ 45″
	". 57. 7.	" . 48. —		". 16. 56	" . 55. —
	". 58. 19	" . 48. 15.		". 17. 12	" . 55. 30.
	". 59. 47	" . 48. 45.		". 18. 12.	" . 55. 30
	6. 2. 8	" . 49. 45.		". 20. 46.	" . 56. 45
	". 3. 36	" . 49. 45.		". 21. 49.	" . 57. 15
	". 5. 7.	" . 50. 15.		". 22. 33.	" . 55. 15.
	". 6. 4.	" . 51. —		". 23. 11.	" . 58. 15.

[Clark:] *June 2nd Sunday 1805*

We had a hard wind and a little rain last night, this morning fair we set out at an early hour, wind from the S W. some little rain to day wind hard a head, the countrey much like that of yesterday as discribed Cap^{t} Lewis walked on shore, himself & the hunters killed 6 Elk & a Bear and 2 mule deer, and 2 buffalow which was all in good order, a beaver also killed to day, passed 9 Islands to day the current swift but regular, we camped on the Lar^{d} Side at the forks of the river the currents & Sizes of them [the rivers] we could not examine this evening a fair night we took some Luner observations of moon & stears.

Course Distance 2nd of June 1805

	miles	
N. 85° W	¾	to a fiew trees on the Lar^{d} point
S. 60° W	¼	on the Lar^{d} point opposit a bluff
S. 40° W.	½	to some trees in the Star^{d} bend
S. 20° E.	1	to some willows on the Lar^{d} Side
S. 30 E	1	to a bush on the Star^{d} point ops^{d} a low bluff.
South	¼	on the Star^{d} point.
S. 45° W.	½	to a tree in a bend on Lar^{d} Side
West	2	to a point on the Lar^{d} Side oppos^{d} to a bluff
S. 68° W	¼	on the Lar^{d} Side ops^{d} an Island
S. 35° W.	¼	on the Lar^{d} Side
S. 25° W.	1	to a point of a timbered bottom on the Lar^{d} Side
South	2¾	to a point on Star^{d} Side ops^{d} a dark bluff passed 3 small Islands
S. 60° W.	1 m.	on the Star^{d} Side passed 2 Is^{ds} on Lar^{d} Side
N. 80° W.	1¾	to the Lar^{d} point ops^{d} a bluff
S. 10° W.	1½	to the lower point of an Island near the Star^{d} point.
S. 65° W.	2	to a point of timber on the Lar^{d} Side ops^{d} a bluff passed the Is^{d} and one near St^{d} Side
S. 20° W.	½	to the head of an Island
South	½	to a point of timber on the Star^{d} Side
S. 72° W	¼	to a point between two large rivers one 362 yards & the other 200
miles	18	

[Lewis:] *Monday June 3rd 1805.*

This morning early we passed over and formed a camp on the point formed by the junction of the two large rivers. here in the course of the day I continued my observations as are above stated. An interesting question was now to be determined; which of these rivers was the Missouri, or that river which the Minnetares call *Amahte Arz̄zha* or Missouri, and which they had discribed to us as approaching very near to the Columbia river. to mistake the stream at this period of the season, two months of the traveling season having now elapsed, and to ascend such stream to the rocky Mountain or perhaps much further before we could inform ourselves whether it did approach the Columbia or not, and then be obliged to return and take the other stream would not only loose us the whole of this season but would probably so dishearten the party that it might defeat the expedition altogether. convinced we were that the utmost circumspection and caution was necessary in deciding on the stream to be taken. to this end an investigation of both streams was the first thing to be done; to learn their widths, debths, comparitive rappidity of their courants and thence the comparitive bodies of water furnished by each; accordingly we dispatched two light canoes with three men in each up those streams; we also sent out several small parties by land with instructions to penetrate the country as far as they conveniently can permitting themselves time to return this evening and indeavour if possible to discover the distant bearing of those rivers by ascending the rising grounds. between the time of my A. M. and meridian Capt. C. & myself stroled out to the top of the hights in the fork of these rivers from whence we had an extensive and most inchanting view; the country in every derection around us was one vast plain in which innumerable herds of Buffalow were seen attended by their shepperds the wolves; the solatary antelope which now had their young were distributed over it's face; some herds of Elk were also seen; the verdure perfectly cloathed the ground, the weather was pleasent and fair; to the South we saw a range of lofty mountains which we supposed to be a continuation of the S. Mountains, streching themselves from S. E. to N. W. terminating abbrubtly about S. West from us; these were partially covered with snow; behind these Mountains and at a great distance, a second and more lofty range of mountains appeared to strech across the country in the same direction with the others, reaching from West, to the N of N. W., where their snowey tops lost themselves beneath the horizon. this last range was perfectly covered with snow. the direction of the rivers could be seen but little way, soon loosing the break of their channels, to our view, in the common plain. on our return to camp we boar a little to the left and discovered a handsome little river falling into the N. fork on Lar.^{d} side about 1½ M.^{ls} above our camp. this little river has as much timber in it's bottoms as either of the larger streams. there are a great number of prickley pears in these plains; the Choke cherry grows here in abundance both in the river bottoms and in the steep ravenes along the river bluffs. saw the yellow and red courants, not yet ripe; also the goosberry which begins to ripen; the wild rose which grows here in great abundance in the bottoms of all these rivers is now in full bloom, and adds not a little to the bea[u]ty of the cenery. we took the width of the two rivers, found the left hand or S. fork 372 yards and the N. fork 200. The no[r]th fork is deeper than the other but it's courant not so swift; it's waters run in the same boiling and roling manner which has uniformly characterized the Missouri throughout it's whole course so far; it's waters are of a whitish brown colour very thick and terbid, also characteristic of the Missouri; while the South fork is perfectly transparent runds, very rappid but with a smoth unriffled surface it's bottom composed of round and flat smooth stones like most rivers issuing from a mountainous country. the bed of the N. fork composed of some gravel but principally mud; in short the air & character of this river is so precisely that of the missouri below that the party with very few exceptions have already pronounced the N. fork to be the Missouri; myself and Cap.^{t} C. not quite so precipitate have not yet decided but if we were to give our opinions I believe we should be in the minority, certain it is that the North fork gives the colouring matter and character which is retained from hence to the gulph of Mexico. I am confident that this river rises in and passes a great distance through an open plain country I expect that it has some of it's sou[r]ces on the Eastern side of the rocky mountain South of the Saskashawan, but that it dose not penetrate the first range of these Mountains. and that much the greater part of it's sources are in a northwardly direction towards the lower and middle parts of the Saskashawan in the open plains. convinced I am that if it penetrated the Rocky Mountains to any great distance it's waters would be clearer unless it should run an immence distance indeed after leaving those mountains through these level plains in order to acquire it's turbid hue. what astonishes us a little is that the Indians who appeared to be so well acquainted with the geography of this country should not have mentioned this river on wright hand if it be not the Missouri; *the river that scolds at all others*, as they call it if there is in reallity such an one, ought agreeably to their account, to have fallen in a considerable distance below, and on the other hand if this right hand or N. fork be the Missouri I am equally astonished at their not mentioning the S. fork which they must have passed in order to get to those large falls which they mention on the Missouri. thus have our cogitating faculties been busily employed all day.

Those who have remained at camp today have been busily engaged in dressing skins for cloathing, notwithstanding that many of them have their feet so mangled and bruised with the stones and rough ground over which they passed barefoot, that they can scarcely walk or stand; at least it is with great pain they do either. for some days past they were unable to wear their mockersons; they have fallen off considerably, but notwithstanding the difficulties past, or those which seem now to mennace us, they still remain perfectly cheerfull. In the evening the parties whom we had sent out returned agreeably to instructions. The parties who had been sent up the rivers in canoes informed that they ascended some distance and had then left their canoes and walked up the rivers a considerable distance further barely leaving themselves time to return; the North fork was not so rappid as the other and afforded the easiest navigation of course; six (7) feet appeared to be the shallowest water of the S. Branch and 5 feet that of the N. Their accounts were by no means satisfactory nor did the information we acquired bring us nigher to the decision of our question or determine us which stream to take. Sergt. Pryor hand [had] ascended the N. fork and had taken the following courses and distances viz —

S. 60° W.	2	Mls. to some timber on the Lard. side
West	– 2.	to a point on the Stard. side, passing the entrance of a river at ½ M. on Lard. side which was 60 yards wide and three feet deep boatd court.
N. 50° W	3.	to a point on lard. side
S. 80° W.	3.	to a point on Lard. side. thence the river bares to the N of West leaving a high hill to the Stard.

Sergt. Gass ascended the South fork and took the following courses (viz.)

S. 30. W.	1.	Ml. to a point Lard. passing three Islands.
South	– 1.	to the Lard. point of an Island.
S. 60° E.	2.	to a tree on the Stard. side
N. 50° E	1.	to on object in a bank Lard. side opd. to the lower point of an Island.
S. 70. E	1½	to a tree on the Lard. side passing an Island
S. 10° E	1.	M. thence the general cource S. 30 W. 5 Mls. or as far as he could discover the direction of the river.

Joseph and Reubin Fields reported that they had been up the South fork about 7 Mls. on a streight course somewhat N of W. and that there the little river which discharges itself into the North fork just above us, was within 100 yards of the S. fork; that they came down this little river and found it a boald runing stream of about 40 yds. wide contai[n]ng much timber in it's bottom, consisting of the narrow and wide leafed cottonwood with some birch and box alder undrgrowth willows rosebushes currents &c. they saw a great number of Elk on this river and some beaver. Those accounts being by no means satisfactory as to the fundamental point; Capt. C. and myself concluded to set out early the next morning with a small party each, and ascend these rivers untill we could perfectly satisfy ourselves of the one, which it would be most expedient for us to take on our main journey to the Pacific. accordingly it was agreed that I should ascend the right hand fork and he the left. I gave orders to Serj.t Pryor Drewyer, Shields, Windsor, Cruzatte and La Page to hold themselves in readiness to accompany me in the morning. Cap.t Clark also selected Reubin & Joseph Fields, Serg.t Gass, Shannon and his black man York, to accompany him. we agreed to go up those rivers one day and a halfs march or further if it should appear necessary to satisfy us more fully of the point in question. the hunters killed 2 Buffaloe, 6 Elk and 4 deer today. the evening proved cloudy. we took a drink of grog this evening and gave the men a dram, and made all matters ready for an early departure in the morning. I had now my sack and blanket happerst[1] in readiness to swing on my back, which is the first time in my life that I had ever prepared a burthen of this kind, and I am fully convinced that it will not be the last. I take my Octant with me also, this I confide [to] La Page.

[Clark:] *June 3.rd Monday 1805*

We formed a camp on the point in the junction of the two rivers, and dispatched a canoe & three men up each river to examine and find if possible which is the most probable branch, the left fork which is the largest we are doubtfull of, the Indians do not mention any river falling in on the right in this part of the Missouri, The Scolding river, if there is such a one should have fallen in below agreeable to their aut.? We also despatched men in different direct[ion]s by land, to a mountain covered with snow to the South & others up each river. Cap.t Lewis and my self walked out & assended the hill in the point observed a leavel open countrey to the foot of the mountains which lye South of this, also a River which falls into the Right hand fork about 1½ miles above its mouth on the Lar.d Side this little river discharges a great deal of water & contains as much cotton timber in its bottoms as either of the others we saw Buffalow & Antelopes &c. wild cheries, red & yellow burries, Goose berries &c. abound in the river bottoms, prickley pares on the high plains, we had a meridian altitude and the Latt^{d} produced was *47° 24′–12″ N.* the after part of the day proved cloudy, we measured each river and found the one to Right hand 200 yards wide of water & the Left hand fork 372 yards wide & rapid. the right hand fork falling the other at a stand and clear, the right fork and the river which fall into it is coloured & a little muddey. Several men complain of their feet being sore in walking in the sand & their being cut by the stones They to be sure have a bad time of it obliged to walk on shore & haul the rope and $^{9}/_{10}$ of their time bear footed, in the evening late the canoes returned and the men informed us that they had assended some miles by water & left their canoes & walked on land the greater part of the day, their accounts by no means satisfactory, Serj^{t} Pryor assended the right hand fork and took the following courses, &^{c}

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[1] A form of the Middle English verb "hap," to wrap, still used provincially in England and Scotland. — ED.

S. 60° W.	2	to a timber on the Lar^{d} Side
West	2	to a point on the Star^{d} Side pass^{d} a River L S. 60 y^{ds} wide 3 feet deep
N. 50° W.	3	to a point on the Lar^{d} Side
S. 80° W	3	to a point on the Lar^{d} Side

thence the river bears to the N. of west leaveing a knob to the right.

Serj^{t} Gass assended the left hand fork and took the following courses viz:

S. 30° W.	$\overset{m}{1}$	to a p^{t} L. S. pass 3 Isd^{s}
South	1	mile to a Lar^{d} point of an Island
S. 60° E.	2	m. to a tree on the Starboard Side
N. 50° E	1	m. to an object in the bank Lar^{d} Side ops^{d} the Lower point of an Island
S. 70° E	1½	m: to a tree on the Lar^{d} Side passing an Island

Gen^{l} course from there
S. 30° W. for 5 miles
S. 10° E. 1 mile, then S.W.

Joseph & Ruben Fields went up the left fork 7 miles on a derect line at which place the small river which falls into the right hand fork approaches within 100 yards of the South fork, they came down the small river which is a bold stream covered with Elk & some beaver, its bottoms covered with wood, as the Information given by those parties respecting the rivers did not satisfy us as to the main & principal branch Cap^t Lewis & my self deturmined to go up each of those rivers one Day & a half with a view to Satisfy ourselves which of the two was the principal stream and best calculated for us to assend. The hunters killed 2 buffalow, 6 Elk & several deer to day. we refreshed our party with a dram &^{c} Cloudy evining.

[Lewis:] *Tuesday June 4th 1805.*

This morning early Capt. C. departed, and at the same time I passed the wright hand fork opposite to our camp below a small Island; from hence I steered N. 30. W. 4½ to a commanding eminence; here I took the following bearings of the mountains which were in view. The North Mountains appear to change their direction from that of being parallel with the Missouri turning to the North and terminating abruptly; their termineation bearing N. 48° E distant by estimate 30 M^{ls} The South Mountains appear to turn to the S. also terminating abrubtly, their extremity bearing S. 8. W. distant 25 M^{ls} The Barn Mountain, a lofty mountain so called from it's resemblance to the roof of a large Barn, is a seperate Mountain and appears reather to the wright of and retreating from the extremity of the S. M^{ts}; this boar S 38. W. distant 35. M^s The north fork which I am now ascending lies to my left and appears to make a considerable bend to the N. W. on it's Western border a range of hills about 10 m^{ls} long appear to lye parallel with the river and from hence bear N. 60° W. to the N. of this range of hills an Elivated point of the river bluff on it's Lar^d side boar N. 72° W. distant 12 M^{ls} to this last object I now directed my course through a high level dry open plain. the whole country in fact appears to be one continued plain to the foot of the mountains or as far as the eye can reach; the soil appears dark rich and fertile yet the grass is by no means as high nor dose it look so luxurient as I should have expected, it is short just sufficient to conceal the ground. great abundance of prickly pears which are extreemly troublesome; as the thorns very readily perce the foot through the Mockerson; they are so numerous that it requires one half of the traveler's attention to avoid them, In these plains I observed great numbers of the brown Curloos, a small species of curloo or plover of a brown colour about the size of the common snipe and not unlike it in form with a long celindric curved and pointed beak; it's wings are proportionately long and the tail short; in the act of liteing this bird lets itself down by an extention of it's wings without motion holding their points very much together above it's back in this rispect differing ascentially from any bird I ever observed. a number of sparrows also of three distinct species I observed. also a small bird which in action resembles the lark, it is about the size of a large sparrow of a dark brown colour with some white fathers in the tail; this bird or that which I take to be the male rises into the air about 60 feet and supporting itself in the air with a brisk motion of the wings sings very sweetly, has several shrill soft notes reather of the plaintive order which it frequently repeats and varies, after remaining stationary about a minute in his aireal station he descends obliquely occasionly pausing and accomnying his decension with a note something like *twit twit twit;* on the ground he is silent.[1] thirty or forty of these birds will be stationed in the air at a time in view. these larks as I shall call them add much to the gayety and cheerfullness of the scene. All those birds are now seting and laying their eggs in the plains; their little nests are to be seen in great abundance as we pass. there are meriads of small grasshoppers in these plains which no doubt furnish the principal aliment of this numerous progeny of the feathered creation. after walking about eight miles I grew thi[r]sty and there being no water in the plains I changed my direction and boar obliquely in towards the river, on my arrival at which about 3 M^{ls}. below the point of observation, we discovered two deer at feed at some distance near the river: I here halted the party and sent Drewyer to kill one of them for breakfast; this excellent hunter so[o]n exceded his orders by killing of them both; they proved to be two Mule Bucks in fine order; we soon kindled a fire cooked and made a hearty meal. it was not yet twelve when we arrived at the river and I was anxious to take the Meridian Al^{td}. of the sun but the clouds prevented my obtaining the observation. after refreshing ourselves we proceded up the river to the extremity of the first course, from whence the river boar on it's general course N. 15°. W. 2. M. to a bluff point on Star^{d}. here Drewyer killed four other deer of the common kind; we skined them and hung up a part of the meat and the skins as we did also of the first, and took as much of the meat as we thought would answer for our suppers and proceeded. N. 30. W. 2 M. to the entrance of a large creek on Lar^{d}. side the part of the river we have passed is from 40 to 60 y^{ds}. wide, is deep, has falling banks, the courant strong, the water terbid and in short has every appearance of the missouri b[e]low except as to size. it's bottoms narrow but well timbered. Salts coal and other mineral appearances as usual; the bluffs principally of dark brown, yellow and some white clay; some freestone also appears in places. The river now boar N. 20°. E. 12. M^{ls}. to a bluff on Lar^{d}.. At the commencement of this course we ascended the hills which are about 200 feet high, and passed through the plains about 3 M. but finding the dry ravenes so steep and numerous we determined to return to the river and travel through it's bottoms and along the foot and sides of the bluffs, accordingly we again reached the river about 4 Miles from the commencement of the last course and encamped a small distance above on the Star^{d}. side in a bend among the willow bushes which defended us from the wind. which blew hard from the N. W. it rained this evening and wet us to the skin; the air was extremely could. just before we encamped Drewyer fired at a large brown bar across the river and wounded him badly but it was too late to pursue him. I killed a braro and a beaver, also at the place of our encampment, a very fine Mule deer. we saw a great number of Buffaloe, Elk, wolves and foxes today. the river bottoms form one emence garden of roses, now in full bloe.

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[1] The black-breasted lark-bunting (*Centrophanes maccowni*). For this bird, see U. S. Geological Survey *Bulletin*, iv, No. 3, July, 1878, pp. 579, 580. — Ed.

[Clark:] *June 4th Tuesday 1805*

Cap^{t} Lewis & my self each with a small party of men set out early. those who accompanied Cap^{t} Lewis were G. Drewyer, Serj^{t} Pryor, J. Shields, P. Crusat J. B. de Page, R. Winser, went up the N. side of the N. fork. those who accompanied me were Serj^{t} Gass, Jos: & Ruben Fields G Shannon & my black man york, and we set out to examine the South fork, our first course was S. 25. W. 7 miles to the S. fork at a Spring, at which place the little river which falls into the N. fork is 100 yards distant only Seperated from the South fork by a narrow ridge, our course from thence S. 20°. W. 8 miles to the river at an Island where we dined below a small river [that] falls in on the S E side which heads in a mountain to the S.E about 20 miles. North of this place about 4 miles the little river brakes thro' a high ridge into the open Leavel plain thro which we have pass^{d} from the point, this plain is covered with low grass & prickley pear, emence number of Prarie dogs or barking squirrels are thro this plain. after eating we proceeded on N. 45°. W. Struck the river at 3 miles 5, 9 & 13 miles at which place we encamped in an old Indian lodge made of Stiks and bark[1] at the river near our camp we saw two white Bear, one of them was nearly catching Joseph Field Joseph Fields could not fire, as his gun was wet, the bear was so near that it struck his foot, and we were not in a situation to give him assistance, a clift of rocks seperate us the bear got allarmed at our Shot & yells & took [to] the river. Some rain all the afternoon Saw Several Gangues of Buffalow at a distance in the open plains on each side, Saw Mule deer antelopes & wolves. The river is rapid & closely hemed on one or the other side with high bluffs, crouded with Islands & graveley bars containing but a small quantity of timber on its bottoms & none on the high land

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[1] The encampment must have been near the site of the government post Fort Benton, situated at the head of steamboat navigation on the Missouri. — ED.

[Lewis:] *Wednesday June 5th 1805.*

This morning was cloudy and so could that I was obleged to have recourse to a blanket coat in order to keep myself comfortable altho' walking. the rain continued during the greater part of last night. the wind hard from N. W. we set out at sunrise and proceded up the river eight miles on the course last taken yesterday evening, at the extremity of which a large creek falls in on the Star^{d} 25 yar^{ds} wide at it's entrance, some timber but no water, notwithstanding the rain; it's course upwards is N. E. it is astonishing what a quantity of water it takes to saturate the soil of this country, the earth of the plains are now opened in large crivices in many places and yet looks like a rich loam from the entrance of this Creek (which I called Lark C.) the river boar N. 50. W. 4 M. at the entrance of this creek the bluffs were very steep and approached the river so near on the Star^{d} side that we assended the hills and passed through the plains; at the extremity of this course we returned to the river which then boar North 2 M^{ls} from the same point, I discovered a lofty single mountain which appear^{d} to be at a great distance, perhaps 80 or more miles, it boar N. 52. W. from it's conic figure I called it tower Mountain.[1] we now passed through the river bottoms to the extremity of the last course thence with the river S 60° W. 1½ M. S 10 W. 3 M. N 50. W. 1½ at the extremity of which I again ascended the bluffs of the river which boar West 10. M. the river making a deep bend to the south that is of at least five miles from the center of the chord line to the center of the bend. on this course we passed through the plains found the plains as yesterday extreemly leavel and beautifull, great quantities of Buffaloe, some wolves foxes and Antelopes seen. near the river the plain is cut by deep ravenes in this plain and from one to nine miles from the river or any water, we saw the largest collection of the burrowing or barking squirrels that we had ever yet seen; we passed through a skirt of the territory of this community for about 7 miles: I (*we*) saw (*near the hills*) a flock of the mountain cock, or a large species of heath hen with a long pointed tail which the Indians informed us were common to the Rockey Mountains. I sent Shields to kill one of them but he was obliged to fire a long distance at them and missed his aim. as we had not killed or eat anything today we each killed a burrowing squ[i]rrel as we passed them in order to make shure of our suppers. we again [in]tersepted the river at the expiration of the last course or the lar^{d} bluffs, from whence it now boar N 80°. W. 2. M^{ls} from this point saw some other lofty mountains to the N. W. of tower M^{tn} which boar N. 65°. W. 80 or 100 M^{ls} distant at the expiration of this course we killed five Elk and a blacktailed or mule deer and encamped on Star^{d} side of the river in a handsome well timbered bottom where there were several old stick lodges. in the forepart of the day there was but little timber in the river bottoms but the quantity is now greater than usual. the river is about 80 y^{ds} wide with a strong steady courant and from 6 to 10 feet [of] water. I had the burrowing squirrels roasted by way of experiment and found the flesh well flavored and tender; some of them were very fat.

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[1] This was the main peak of the Three Buttes, or Sweetgrass Hills, which from Lewis's point of view would appear as a single mountain. "52°" should be "30°," as in the Biddle text. — ED.

[Clark:] *June 5th Wednesday 1805*

Some little rain & snow last night the mountains to our S E. covered with snow this morning air verry cold & raining a little, we saw 8 buffalow opposit, the[y] made 2 attempts to cross, the water being so swift they could not, about the time we were setting out *three* white bear approached our camp we killed the three & eate part of one & set out & proceeded on N. 20°. W 11 miles struck the river at maney places in this distance to a ridge on the N. Side from the top of which I could plainly see a mountain to the South & W covered with Snow at a long distance, The mountains opposit to us to the S.E. is also covered with snow this morning. a high ridge from those mountains approach the river on the S E side forming some clifts of hard dark Stone. From the ridge at which place I struck the river last, I could discover that the river run west of south a long distance, and has a strong rapid current, as this river continued its width debth & rapidity and the course west of south, going up further would be useless, I deturmined to return, I accordingly set out, thro' the plain on a course N 30° E on my return & struck the little river at 20 miles passing thro a Leavel plain,[1] at the little river we killed 2 buck Elk & dined on their marrow bones, proceeded on a few miles & camped, haveing killed 2 deer which was verry fat, some few drops of rain today, the evening fair wind hard from the N. E. I saw great numbers of Elk & white tale deer, some beaver, antelope mule deer & wolves & one bear on this little river marked my name in a tree N. side near the ridge where the little river brakes thro'

[Lewis:] *Thursday June 6th 1805.*

I now became well convinced that this branch of the Missouri had it's direction too much to the North for our rout to the Pacific, and therefore determined to return the next day after taking an observation of the ⊙'s Meridian Altitude in order to fix the latitude of the place. The forepart of the last evening was fair but in the latter part of the night clouded up and cont[i]nued so with short intervals of sunshine untill a little before noon when the whole horizon was overcast, and I of course disappointed in making the observation which I much wished. I had sent Sergt. Pryor and Windsor early this morning with orders to procede up the river to some commanding eminence and take it's bearing as far as possible. in the mean time the four others and myself were busily engaged in making two rafts on which we purposed descending the river; we had just completed this work when Sergt. Pryor and Windsor returned, it being about noon; they reported that they had proceded from hence S 70. W 6 M. to the summit of a commanding eminence from whence the river on their left was about 2½ miles distant; that a point of it's Lard. bluff, which was visible boar S 80. W. distant about 15 M^{s}.; that the river on their left bent gradually arround to this point, and from thence seemed to run Northwardly. we now took dinner and embarcked with our plunder and five Elk's skins on the rafts but were soon convinced that this mode of navigation was hazerdous particularly with those rafts they being too small and slender. we wet a part of our baggage and were near loosing one of our guns; I therefore determined to abandon the rafts and return as we had come, by land. I regretted much being obliged to leave my Elk's skins, which I wanted to assist in forming my leather boat; those we had prepared at Fort Mandan being injured in such manner that they would not answer. we again swung our packs and took our way through the open plains for about 12 M^{ls}. when we struck the river; the wind blew a storm from N. E. accompanyed by frequent showers of rain; we were wet and very could. continued our rout down the river only a few miles before the abbruptness of the clifts and their near approach to the river compelled us take the plains and once more face the storm; here we boar reather too much to the North and it was late in the evening before we reached the river, in our way we killed two buffaloe and took with us as much of the flesh as served us that night, and a part of the next day. we encamped a little below the entrance of the large dry Creek called Lark C. having traveled abut 23 M^{ls}. since noon. it continues to rain and we have no shelter an uncomfortable nights rest is the natural consequence.

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[1] The explorers called this Tanzey River; it is now known as Teton River, a name derived not from the Siouan tribe of Tetons, but from the French *téton*, "breast, nipple." — Ed.

[Clark:] *June 6th Thursday 1805*

a cloudy cold raw day wind hard from the N.E. we set out early & traveled down the little river which was imedeately in our course on this river we killed 7 Deer for their Skins the bottoms of this little river is in everry respect (*except in extent*) like the large bottoms of the Missouri below the forks containing a great perpotion of a kind of cotton wood with a leaf resembling a wild Cherry. I also observed wind [wild] Tanzey on this little river in great quantities, we halted at

12 oClock and eate a part of a fat Buck, after Dinner we assended the Plain at which time it began to rain and continued all day, at 5 oClock we arrived at our camp on the point, where I expected to meet Capt Lewis he did not return this evening. My self and party much fatigued haveing walked constantly as hard as we could march over a Dry hard plain, decending & assending the steep river hills & gullies, in my absence the party had killed an Elk & 2 buffalow, I sent out for the meat a part of which was brought in. nothing remarkable had transpired at camp in my absence

[Lewis:] *Friday June 7th 1805.—*

It continued to rain almost without intermission last night and as I expected we had a most disagreable and wrestless night. our camp possessing no allurements, we left our watery beads at an early hour and continued our rout down the river. it still continues to rain the wind hard from N. E. and could. the grownd remarkably slipry, insomuch that we were unable to walk on the sides of the bluffs where we had passed as we ascended the river. notwithstanding the rain that has now fallen the earth of these bluffs is not wet to a greater debth than 2 inches; in it's present state it is precisely like walking over frozan grownd which is thawed to small debth and slips equally as bad. this clay not only appears to require more water to saturate it as I before observed than any earth I ever observed but when saturated it appears on the other hand to yeald it's moisture with equal difficulty. In passing along the face of one of these bluffs today I sliped at a narrow pass of about 30 yards in length and but for a quick and fortunate recovery by means of my espontoon I should been precipitated into the river down a craggy pricipice of about ninety feet. I had scarcely reached a place on which I could stand with tolerable safety even with the assistance of my espontoon before I heard a voice behind me cry out god god Capt. what shall I do on turning about I found it was Windsor who had sliped and fallen ab[o]ut the center of this narrow pass and was lying prostrate on his belley, with his wright hand arm and leg over the precipice while he was holding on with the left arm and foot as well as he could which appeared to be with much difficulty. I discovered his danger and the trepedation which he was in gave me still further concern for I expected every instant to see him loose his strength and slip off; altho' much allarmed at his situation I disguised my feelings and spoke very calmly to him and assured him that he was in no kind of danger, to take the knife out of his belt behind him with his wright hand and dig a hole with it in the face of the bank to receive his wright foot which he did and then raised himself to his knees; I then directed him to take off his mockersons and to come forward on his hands and knees holding the knife in one hand and the gun in the other this he happily effected and escaped. those who were some little distance b[e]hind returned by my orders and waded the river at the foot of the bluff where the water was breast deep. it was useless we knew to attempt the plains on this part of the river in consequence of the numerous steep ravines which intersected and which were quite as bad as the river bluffs. we therefore continued our rout down the river sometimes in the mud and water of the bottom lands, at others in the river to our breasts and when the water became so deep that we could not wade we cut footsteps in the face of the steep bluffs with our knives and proceded. we continued our disagreeable march th[r]ough the rain mud and water untill late in the evening having traveled only about 18 Miles, and encamped in an old Indian stick lodge which afforded us a dry and comfortable shelter. during the day we had killed six deer some of them in very good order altho' none of them had yet entirely discarded their winter coats. we had reserved and brought with us a good supply of the best peices; we roasted and eat a hearty supper of our venison not having taisted a mo[r]sel before during the day; I now laid myself down on some willow boughs to a comfortable nights rest, and felt indeed as if I was fully repaid for the toil and pain of the day, so much will a good shelter, a dry bed, and comfortable supper revive the sperits of the w[e]aryed, wet and hungry traveler.

[Clark:]

June 7th Friday 1805

rained moderately all the last night and continues this morning, the wind from the S.W. off the mountains, The Thermometer stood at 40° above 0, I allow several men to hunt a short time to day, the rain continue moderately all day the bottom verry muddey 2 buffalow an Elk & Deer killed to day Capt Lewis not returned yet. river falling

CHAPTER X

FROM MARIA'S RIVER TO THE GREAT FALLS OF THE MISSOURI.

Lewis's Journal, June 8–20, 1805
Clark's Journal, June 8–20

[Lewis:] *Saturday June 8th 1805.* —

IT continue to rain moderately all last night this morning was cloudy untill about ten OClock when it cleared off and became a fine day. we breakfasted and set out about sunrise and continued our rout down the river bottoms through the mud and water as yesterday, tho' the road was somewhat better than yesterday and we were not so often compelled to wade in the river. we passed some dangerous and difficult bluffs. The river bottoms affording all the timber which is to be seen in the country they are filled with innumerable little birds that resort thither either for shelter or to build their nests. when sun began to shine today these birds appeared to be very gay and sung most inchantingly; I observed among them the brown thrush, Robbin, turtle dove linnit goaldfinch, the large and small blackbird, wren and several other birds of less note. some of the inhabitants of the praries also take reffuge in these woods at night or from a storm. The whole of my party to a man except myself were fully pe[r]suaided that this river was the Missouri, but being fully of opinion that it was neither the main stream, nor that which it would be advisable for us to take, I determined to give it a name and in honour of Miss Maria W——d.[1] called it Maria's River. it is true that the hue of the waters of this turbulent and troubled stream but illy comport with the pure celestial virtues and amiable qualifications of that lovely fair one; but on the other hand it is a noble river; one destined to become in my opinion an object of contention between the two great powers of America and Great Britin with rispect to the adjustment of the Northwestwardly boundary of the former; and that it will become one of the most interesting branc[h]es of the Missouri in a commercial point of view, I have but little doubt, as it abounds with anamals of the fur kind, and most probably furnishes a safe and direct communication to that productive country of valuable furs exclusively enjoyed at present by the subjects of his Britanic Majesty; in adition to which it passes through a rich fertile and one of the most beatifully picteresque countries that I ever beheld, through the wide expance of which, innumerable herds of living anamals are seen, it's borders garnished with one continued garden of roses, while it's lofty and open forrests are the habitation of miriads of the feathered tribes who salute the ear of the passing traveler with their wild and simple, yet s[w]eet and cheerfull melody. I arrived at camp about 5 OClock in the evening much fatiegued, where I found Capt. Clark and the ballance of the party waiting our return with some anxiety for our safety having been absent near two days longer than we had engaged to return. on our way to camp we had killed 4 deer and two Antelopes; the skins of which as well as those we killed while on the rout we brought with us. Maria's river may be stated generally from sixty to a hundred yards wide, with a strong and steady current and possessing 5 feet [of] water in the most sholly parts.

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[1] **Miss Maria Wood, a cousin of Captain Lewis, who was later Mrs. Clarkson. — Ed.**

As the incidents which occurred Capt. C. during his rout will be more fully and satisfactoryley expressed by himself I here insert a copy of his journal during the days we wer[e] seperated.[1]

I now gave myself this evening to rest from my labours, took a drink of grog and gave the men who had accompanyed me each a dram. Capt. Clark ploted the courses of the two rivers as far as we had ascended them. I now began more than ever to suspect the varacity of Mr. Fidler or the correctness of his instruments. for I see that Arrasmith[1] in his late map of N. America has laid down a remarkable mountain in the chain of the Rocky mountains called the tooth nearly as far South as Latitude 45°., and this is said to be from the discoveries of Mr. Fidler.[2] we are now within a hundred miles of the Rocky Mountains, and I find from my observation of the 3rd Inst that the latitude of this place is 47° 24′ 12″.8. the river must therefore turn much to the South between this and the rocky Mountain to have permitted Mr. Fidler to have passed along the Eastern border of these mountains as far S. as nearly 45° without even seeing it. but from hence as far as Capt. C. had ascended the S. fork or Missouri being the distance of 55 (*45 miles in straight line*) Miles it's course is S. 29° W. and it still appeared to bear considerably to the W. of South as far as he could see it. I think therefore that we shall find that the Missouri enters the rocky mountains to the North of 45°. we did take the liberty of placing his discoveries or at least the Southern extremity of them about a degree further N. in the sket[c]h which we sent on to the government this spring mearly from the Indian information of the bearing from Fort Mandan of the entrance of the Missouri into the Rocky Mountains, and I reather suspect that actual observation will take him at least one other degree further North. The general Course of Maria's river from hence to the extremity of the last course taken by Sergt. pryor is N. 69° W. 59 Mls.

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[1] Lewis here copies Clark's Journal for June 4–8; we omit his version, as being a close transcript from the entry in Clark-Voorhis note-book No. 1, which we publish in full. — Ed.

[Clark:] *June 8th Saturday* 1805

rained moderately all the last night & some this morning untill 10 oClock, I am some what uneasy for Capt. Lewis &

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[1] Aaron Arrowsmith was a London map-maker of repute. The map to which Lewis here refers was one first published in 1795, "with additions to 1802"; it was entitled "A map exhibiting all the new discoveries in the interior parts of North America." Arrowsmith's dedication of this map to the Hudson's Bay Company indicates the channel by which Fidler's discoveries were communicated to him. — Ed.

[2] Peter Fidler was a trader and surveyor for the Hudson's Bay Co., in whose service he was from 1791 until his death in 1822. At various times he was in charge of important posts belonging to that Company; see sketch of his life in Bryce's *Hist. H. B. Co.*, pp. 282–285. — Ed.

party as days has now passed the time he was to have returned, I had all the arms put in order and permited several men to hunt, aired and dried our stores &c. The rivers at this point has fallen 6 Inches since our arrival, at 10 oClock cleared away and became fair. the wind all the morning from the S.W. & hard. The water of the South fork is of a redish brown colour this morning the other river of a whitish colour as usual. The mountains to the South covered with Snow. wind shifted to the N E in the evening. about 5 oClock Capt. Lewis arrived with the party much fatigued, and inform'd me that he had assended the river about 60 miles by Land and that the river had a bold current of about 80 or 100 yards wide the bottoms of Gravel & mud, and may be estimated at 5 feet water in sholest parts.

The courses which Capt. Lewis went to examine the N. fork of the Missouri the 4th of June 1805

N. 30° W.	4½	to a *bite* on the Stard Side from the top of this hite the N. Mountains appear to turn to the N. & terminate, they bear N. 48° E about 30 miles, the countrey is a leavel plain. The South mountains bear S, and appear to terminate, bearing S. 80° W. 35 ms. The barn mountain S. 38° W. 40, the river on the left appears to be turning to the N.W.
N. 70° W.	12	to the N.E. of a high hill
N. 15° W.	2	to the river bluff
N. 30° W.	2	to the mouth of a large Creek on Lard Side a chain of high hills which run paralal to the river on the S. Side cease
N. 20° E.	12	to the river Bluffs camped. a Dry creek falls in at the end of the course on the Stard Side from the N E.
		June 5th
N. 50° W.	4,	up the river
North	2	The Tower Mountain bore N. 52, W. about 60 miles a high single Mtn.
S. 60° W.	1½	allong the river
S. 10° W.	3	allong the river
N. 50° W.	1½	allong the river.

West	10	to the river bluff across a Plain river haveing made a considerable bend to the South. Cent^{r} of bend 5 m^{s}
N. 80° W.	2	miles on the river
S. 70° W	6	to a high hill on S.S. & ½ miles N from the river in a plain
S. 80° W.	15 m.	with the gen^{l} course of the river the countrey is a leavele open Plain, near the river steep reveins, the bottoms narrow but well timbered, bluff from ¼ to ¾ asunder. the countrey as far as could be seen is a leavel plain.
	77½	

Some rain in the evening. the left hand fork rose a little.

[Lewis:] *Sunday June 9th 1805.*

We determined to deposite at this place the large red perogue all the heavy baggage which we could possibly do without and some provision, salt, tools powder and Lead &c with a view to lighten our vessels and at the same time to strengthen their crews by means of the seven hands who have been heretofore employ^{d} in navigating the red perogue; accordingly we set some hands to diging a hole or cellar for the reception of our stores. these holes in the ground or deposits are called by the engages *cashes* (*cachés*);[1] on enquiry I found that Cruzatte was well acquainted [with] this business and therefore left the management of it intirely to him. today we examined our maps, and compared the information derived as well from them as [from] the Indians and fully settled in our minds the propryety of addopting the South fork for the Missouri, as that which it would be most expedient for us to take. The information of M^{r} Fidler incorrect as it is strongly argued the necessity of taking the South fork, for if he has been along the Eastern side of the rocky mountains as far as even Lat^{d} 47°, which I think fully as far south as he ever was in that direction, and saw only small rivulets making down from those mountains the presumption is very strong that those little streams do not penetrate the rocky Mountains to such distance as would afford rational grownds for a conjecture that they had their sources near any navigable branch of the Columbia, and if he has seen those rivulets as far south as 47° they are most probably the waters of some No[r]thern branch of the Missouri or South fork probably the river called by the Indians Medicine River; we therefore cannot hope by going Northwardly of this place being already in Latitude 47° 24″ to find a stream between this place and the Saskashawan which dose penetrate the Rocky mountains, and which agreeably to the information of the Indians with rispect to the Missouri, dose possess a navigable curent some distance in those mountains. The Indian information also argued strongly in favour of the South fork. they informed us that the water of the Missouri was nearly transparent at the great falls, this is the case with the water of the South fork; that the falls lay a little to the South of sunset from them; this is also probable as we are only a few minutes North of Fort Mandan and the South fork bears considerably South from hence to the Mountains; that the falls are below the rocky mountains and near the No[r]thern termineation of one range of those Mountains. a range of mountains which apear behind the S. Mountains and which appear to terminate S. W. from this place and on this side of the unbroken chain of the Rocky Mountains gives us hope that this part of their information is also correct, and there is sufficient distance between this and the mountains for many and I fear for us much too many falls. another impression on my mind is that if the Indians had passed any stream as large as the South fork on their way to the Missouri that they would not have omitted mentioning it; and the South fork from it's size and complexion of it's waters must enter the R? Mountains and in my opinion penetrates them to a great distance, or els whence such an immence body of water as it discharges; it cannot procede from the dry plains to the N.W. of the Yellow Stone river on the East side of the Rocky Mountains for those numerous large dry channels which we witnessed on that side as we ascended the Missouri forbid such a conjecture; and that it should take it's sourses to the N.W. under those mountains the travels of M? Fidler fo[r]bid us to believe. Those ideas as they occurred to me I indevoured to impress on the minds of the party all of whom except Capt. C. being still firm in the belief that the N. Fork was the Missouri and that which we ought to take; they said very cheerfully that they were ready to follow us any wher[e] we thought proper to direct but that they still thought that the other was the river and that they were affraid that the South fork would soon termineate in the mountains and leave us at a great distance from the Columbia. Cruzatte who had been an old Missouri navigator and who from his integrity knowledge and skill as a waterman had acquired the confidence of every individual of the party declared it as his opinion that the N. fork was the true genuine Missouri and could be no other. finding them so determined in this beleif, and wishing that if we were in an error to be able to detect it and rectify it as soon as possible it was agreed between Capt. C. and myself that one of us should set out with a small party by land up the South fork and continue our rout up it untill we found the falls or reached the snowy Mountains by which means we should be enabled to determine this question prety accurately. this expedition I prefered undertaking as Capt. C. [is the] best waterman &c. and determined to set out the day after tomorrow; I wished to make some further observations at this place, and as we had determined to leave our blacksmith's bellows and tools here it was necessary to repare some of our arms, and particularly my Airgun the main spring of which was broken, before we left this place. these and some other preperations will necessarily detain us two perhaps three days. I felt myself very unwell this morning and took a portion of salts from which I feel much releif this evening. The cash being completed I walked to it and examined it's construction. it is in a high plain about 40 yards distant from a steep bluff of the South branch on it's no[r]thern side; the situation a dry one which is always necessary. a place being fixed on for a cash, a circle ab[o]ut 20 inches in diameter is first discribed, the terf or sod of this circle is carefully removed, being taken out as entire as possible in order that it may be replaced in the same situation when the chash is filled and secured. this circular hole is then sunk perpendicularly to the debth of one foot, if the ground be not firm somewhat deeper. they then begin to work it out wider as they proceed downwards untill they get it about six or seven feet deep giving it nearly the shape of the kettle or lower part of a large still. it's bottom is also somewhat sunk in the center. the dementions of the cash is in proportion to the quantity of articles intended to be deposited. as the earth is dug it is handed up in a vessel and carefully laid on a skin or cloth and then carryed to some place where it can be thrown in such manner as to conseal it usually into some runing stream wher it is washed away and leaves no traces which might lead to the discovery of the cash. before the goods are deposited they must be well dryed; a parsel of small dry sticks are then collected and with then [them] a floor is maid of three or four inches thick which is then covered with some dry hay or a raw hide well dryed; on this the articles are deposited, taking care to keep them from touching the walls by putting other dry sticks between as you stoe away the merchandize, when nearly full the goods are covered with a skin and earth thrown in and well ramed untill with the addition of the turf furst removed the whole is on a level with the serface of the ground. in this manner dryed skins or merchandize will keep perfectly sound for several years. the traders of the Missouri particularly those engaged in the trade with the Siouxs are obliged to have frequent recourse to this method in order to avoyd being robed. most of the men are busily engaged dressing skins for cloathing. In the evening Cruzatte gave us some music on the violin and the men passed the evening in dancing singing &c and were extreemly cheerfull.

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[1] The French word *caché*, meaning "hidden." — ED.

Point of observation N° 27. June 9th 1805.

At our camp on the point of land formed by the junction of the Missouri and Maria's rivers made the following observations.

Magnetic Azimuth of ⊙ with Circumferentr	Time by Chronometer				: Altitude of ⊙'s: : U. L. with Sextant.		
		h.	m.	s.			
N. 70° E	A.M.	8.	30.	44.	58°	12′	45″
N. 71° E.	"	8.	37.	35.	69.	29′	45.

Took Equal Altitudes of ⊙ with Sextant.

	h	m	s		h	m	s	
A.M.	8.	42.	56.	P.M.	5.	50.	43	Altd. by Sextant at the tim[e] of observation 62°. 18′ 15″
	"	42.	32.		"	52.	15	
	"	46.	9.		".	53.	52	

Chronometer too fast on mean time 1. 19. 45. 7. (h m s)

Observed Magnetic azimuth of the Sun.

Azimuth by Circumferentr.		Time by Chronometer			: Altitude by Sextant of ⊙'s L. L.		
		h	m	s			
S. 77°. W.	P.M.	6.	12.	15.	55°.	6′.	15″.
S. 78°. W.	"	6.	17.	4.	53°.	29′.	45.

Observed Meridian Altitude of ⊙'s L. L. with Octant by the back observation } 54°. 54′. ."

Latitude deduced from this observation. 47°. 28′. 46″.2

Observed time and distance of ☽'s Western limb from, *a*. Aquilæ ✱.

East: with Sextant.

	Time			Distance					Time			Distance		
	h	m	s						h	m	s			
P.M.	11.	9.	26	58°.	55′.	00″	:	P.M.	11.	18.	30	58°.	51′	15″
	"	13.	33	"	54.	15.	:		"	22.	5.	"	50.	00.
	"	16.	00.	".	52.	30.	:		"	24.	20.	".	49.	30.

The Standing error of the Sextant is 8′. 45″. — or Sub. That of the Octant by the back observation 2°. 40′. + or addetive by the direct observation with the same instumt. 2°. + only.

Observed time and distance of ☽'s Western limb from Spica. ♍. ✱.

West with Sextant.

	Time			Distance				Time			Distance		
	h	m	s					h	m	s			
P.M.	11.	29.	31.	35°.	55′.	00″	P.M.	11.	39.	9.	35°.	57′	00″
	"	33.	56.	".	55.	30		"	41.	4.	".	57.	45.
	".	36.	6.	".	56.	00		".	44.	14	".	59.	—

Observed Magnetic Azimuth of Pole Star.

		h	m	s
Time by Chromometer astronomical	P.M.	12.	58.	12.
Azimuth by Circumferentor		N. 15°. W.		

[Clark:]

June 9th Sunday

a fair morning the wind hard from the S W. the river dureing the night fell I Inch, we conclude to burry a few of our heavy articles, Some Powder & Lead provisions & a few Tools, in case of accident and leave one perogue at this place, and as soon as those things are accomplished to assend the South fork, which appears to be more in our course than the N. fork the Genl. Course of the South fork for 35 miles is S. 29° W. that of the N fork is N. 69° W. for 59 miles, and as we are North of Fort Mandan it is probable the most Southerley fork is the best for us. Capt. Lewis a little unwell to day & take salts &c. send out 7 men to make a cache or hole to burry the stores, air our cloathes &c. &c. finish'd the cache or seller &c. the men all engaged dressing Skins for their clothes, in the evening the party amused themselves danceing and Singing Songes in the most social manner. had a meridian altitude which gave 47° 24′. 29″ took some Luner observations which gave for Longitude [blank space in MS.] variation 15° ½ East

[Lewis:]

Monday June 10th 1805.

The day being fair and fine we dryed all our baggage and merchandize. Shields renewed the main-spring of my air-gun we have been much indebted to the ingenuity of this man on many occasions; without having served any regular apprenticeship to any trade, he makes his own tools principally and works extreemly well in either wood or metal, and in this way has been extreemly servicable to us, as well as being a good hunter and an excellent waterman. in order to guard against accedents we thou[gh]t it well to conceal some ammunicion here and accordingly buryed a tin cannester of 4 lbs. of powder and an adequate quantity of lead near our tent; a cannester of 6 lbs. lead and an ax in a thicket up the S. Fork three hundred yards distant from the point. we concluded that we still could spare more amunition for this deposit Capt. Clark was therefore to make a further deposit in the morning, in addition to one Keg of 20 lbs. and an adequate proportion of lead which had been laid by to be buryed in the large Cash. we now scelected the articles to be deposited in this cash which consisted of 2 best falling axes, one auger, a set of plains [planes], some files, blacksmiths bellowses and hammers Stake tongs &c. 1 Keg of flour, 2 Kegs of parched meal, 2 Kegs of Pork, 1 Keg of salt, some chissels, a cooper's Howel, some tin cups, 2 Musquets, 3 brown bear skins, beaver skins, horns of the bighorned anamal, a part of the men's robes clothing and all their superfluous baggage of every discription, and beaver traps. we drew up the red perogue into the middle of a small Island at the entrance of Maria's river, and secured and made her fast to the trees to prevent the high floods from carrying her off. put my brand on several trees standing near her, and covered her with brush to shelter her from the effects of the sun. At 3 P.M. we had a hard wind from the S. W. which continued about an hour attended with thunder and rain. as soon as the shower had passed over we drew out our canoes, corked, repared and loaded them. I still feel myself somewhat unwell with the disentary, but determined to set out in the morning up the South fork or Missouri leaving Capt. Clark to compleat the deposit and follow me by water with the party; accordingly gave orders to Drewyer, Joseph Fields, Gibson and Goodrich to hold themselves in readiness to accompany me in the morning. *Sah-câh-gâh, we â*, our Indian woman is very sick this evening; Capt. C. blead her. the night was cloudy with some rain.

Observed Meridian Altitude of ⊙'s L. L with Octant by the Back observation	54° 32'.
Latitude deduced from this observation	47° 22' 52" .8.
Mean Latitude of the Entrance of Maria's river as deduced from three observations of ⊙ Altd.	47° 25' 17" .2 North.

I saw a small bird today which I do not recollect ever having seen before, it is about the size of the blue thrush or catbird, and it's contour not unlike that bird. the beak is convex, moderately curved, black, smoth, and large in proportion to its size. the legs were black, it had four toes of the same colour on ea[c]h foot, and the nails appeared long and somewhat in form like the tallons of the haulk [hawk], the eye black and proportionably large. a bluish brown colour occupyed the head, neck, and back, the belly was white; the tail was reather long in proportion and appeared to be composed of feathers of equal length of which a part of those in the center were white the others black. the wings were long and were also varigated with white and black. on each side of the head from the beak back to the neck a small black stripe extended imbrasing the eye. it appeared to be very busy in catching insects which I presume is it's usual food; I found the nest of this little bird, the female which differed but little in size or plumage from the male was seting on four eggs of a pale blue colour with small black freckles or dots.[1] the bee martin or *Kingbird* is common to this country; tho' there are no bees in this country, nor have we met with a honey bee since we passed the entrance of the Osage River. (*Kanzas river.*)

[Clark:]

June 10th Monday 1805

a fine day dry all our articles arrange our baggage burry some Powder & lead in the point, some Lead a canister of Powder & an ax in a thicket in the point at some distance, and in the large cache or hole we buried on the up land near the S. fork 1 mile up S.S. we drew up our large Perogue into the middle of a small Island in the North fork and covered her with bushes after makeing her fast to the trees, branded several trees to prevent the Indians injureing her, at 3 oClock we had hard wind from the S.W. thunder and rain for about an hour after which we repaired & corked the canoes & loadded them. Sahcahgagweâ our Indian woman verry sick I blead her, we deturmined to assend the South fork, and one of us, Capt. Lewis or my self to go by land as far as the Snow mountains S. 20° W. and examine the river & countrey course &c to be certain of our assending the proper river, Capt Lewis inclines to go by land on this expedition, according selects 4 men George Drewyer, Gibson, Jo. Fields & S. Gutrich to accompany him & deturmine to set out in the morning. The after noon or night cloudy some rain, river riseing a little.

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[1] Coues identifies this as the white-rumped shrike (*Lanius excubitoroides*). — Ed.

[Lewis:] *Tuesday June 11th 1805.*

This morning I felt much better, but somewhat w[e]akened by my disorder. at 8 A.M. I swung my pack, and set forward with my little party. proceeded to the point where Rose (*Tansey*) River a branch [of] Maria's River approaches the Missouri so nearly. from this hight we discovered a herd of Elk on the Missouri just above us to which we desended and soon killed four of them. we butchered them and hung up the meat and skins in view of the river in order that the party might get them. I determined to take dinner here, but before the meal was prepared I was taken with such violent pain in the intestens that I was unable to partake of the feast of marrowbones. my pain still increased and towards evening was attended with a high fever; finding myself unable to march, I determined to prepare a camp of some willow boughs and remain all night. having brought no medecine with me I resolved to try an experiment with some simples; and the Choke cherry which grew abundantly in the bottom first struck my attention; I directed a parsel of the small twigs to be geathered striped of their leaves, cut into pieces of about 2 Inches in length and boiled in water untill a strong black decoction of an astringent bitter tast was produced; at sunset I took a point [pint] of this decoction and ab[o]ut an hour after repeated the d[o]ze by 10 in the evening I was entirely releived from pain and in fact every symptom of the disorder forsook me; my fever abated, a gentle perspiration was produced and I had a comfortable and refreshing nights rest. Goodrich who is remarkably fond of fishing caught several douzen fish of two different species — one about 9 inches long of white colour round and in form and fins resembles the white chub common to the Potomac; this fish has a smaller head than the Chubb and the mouth is beset both above and below with a rim of fine sharp teeth; the eye moderately large, the puple dark and the iris which is narrow is of a yellowish brown colour, they bite at meat or grasshoppers. this is a soft fish, not very good, tho' the flesh is of a fine white colour. the other species is precisely the form and about the size of the well known fish called the *Hickary Shad* or *old wife*, with the exception of the teeth, a rim of which garnish the outer edge of both the upper and lower jaw; the tonge and pallet are also beset with long sharp teeth bending inwards, the eye of this fish is very large, and the iris of a silvery coulour and wide. of the 1st species we had caught some few before our arrival at the entrance of Maria's river, but of the last we had seen none untill we reached that place and took them in Missouri above it's junction with that river.[1] the latter kind are much the best, and do not inhabit muddy water; the white cat continue as high as the entrance of Maria's R, but those we have caught above Mandans never excede 6 lbs. I beleive that there are but few in this part of the Missouri. saw an abundance of game today even in our short march of 9. Miles.

[Clark:] *June 11th Tuesday 1805*

a fair morning wind from the S W. hard we burry 1 keg in the cach & 2 canisters of Powder in 2 seperate places all with Lead; & in the cach 2 axes, auger, Plains, 1 keg flour, 2 kegs Pork, 2 Kegs Parched meal 1 keg salt, files, chisel, 2 Musquits, some tin cups, Howel, 3 bear skins, Beaver Skins, Horns, & parts of the mens robes & clothes. Beaver Traps and blacksmith's tools. Capt. Lewis set out at 8 oClock we delayed to repair some guns out of order & complete our deposit, which took us the day the evening fair and fine wind from the N.W. after night it became cold & the wind blew hard, the Indian woman verry sick, I blead her which appeared to be of great service to her, both rivers riseing fast

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[1] The following are Coues's identifications: the first of these fishes is a species of pike-perch (*Stizostedion canadense*); the second is one of the Missouri herrings (*Hyodon alosoides*). — Ed.

[Lewis:] *Wednesday June 12th 1805.*

This morning I felt myself quite revived, took another portion of my decoction and set out at sunrise. I now boar out from the river in order to avoid the steep ravines of the river which usually make out in the plain to the distance of one or two miles; after gaining the leavel plain my cou[r]se was a litt[l]e to the West of S. W. having traveled about 12 miles by 9 in the morning, the sun became warm, and I boar a little to the south in order to gain the river as well to obtain water to allay my thirst as to kill something for breakfast; for the plain through which we had been passing possesses no water and is so level that we cannot approach the buffaloe within shot before they discover us and take to flight. we arrived at the river about 10 A. M. having traveled about 15. M. at this place there is a handsom open bottom with some cottonwood timber, here we met with two large bear, and killed them boath at the first fire, a circumstance which I beleive has never happend with the party in killing the brown bear before. we dressed the bear, breakfasted on a part of one of them and hung the meat and skins on the trees out of the reach of the wolves. I left a note on a stick near the river for Capt. Clark, informing him of my progress &c. after refreshing ourselves about 2 hours we again ascended the bluffs and gained the high plain; saw a great number of burrowing squirrels in the plains today. also wolves Antelopes mule deer and immence herds of buffaloe. we passed a ridge of land considerably higher than the adjacent plain on either side, from this hight we had a most beatifull and picturesk view of the Rocky mountains which wer perfectly covered with Snow and reaching from S.E. to the N. of N.W. they appear to be formed of several ranges each succeeding range rising higher than the preceding one untill the most distant appear to loose their snowey tops in the clouds; this was an august spectacle and still rendered more formidable by the recollection that we had them to pass. we traveled about twelve miles when we agin struck the Missoury at a handsome little bottom of Cottonwood timber and altho' the sun had not yet set I felt myself somewhat w[e]ary being weakened I presume by late disorder; and therfore determined to remain here during the ballance of the day and night, having marched about 27 Miles today. on our way in the evening we had killed a buffaloe, an Antelope and three mule deer, and taken a sufficient quantity of the best of the flesh of these anamals for three meals, which we had brought with us. This evening I ate very heartily and after pening the transactions of the day amused myself catching those white fish mentioned yesterday; they are here in great abundance I caught upwards of a douzen in a few minutes; they bit most freely at the melt [milt] of a deer which goodrich had brought with him for the purpose of fishing.

The narrow leafed cottonwood grows here in common with the other species of the same tree with a broad leaf or that which has constituted the major part of the timber of the Missouri from it's junction with the Mississippi to this place. The narrow-leafed cottonwood differs only from the other in the shape of it's leaf and greater thickness of it's bark. the leaf is a long oval acutely pointed, about 2½ or 3 Inches long and from ¾ to an inch in width; it is thick, sometimes slightly grooved or channeled; margin slightly serrate; the upper disk of a common green while the under disk is of a whitish green; the leaf is smoth. the beaver appear to be extremely fond of this tree and even seem to scelect it from among the other species of Cottonwood, probably from it's affording a deeper and softer bark than the other species. saw some sign of the Otter as well as beaver near our camp, also a great number of tracks of the brown bear; these fellows leave a formidable impression in the mud or sand I measured one this evening which was eleven inches long exclusive of the tallons and seven and ¼ in width.

[Clark:] *June 12th 1805 Wednesday*

last night was clear and cold, this morning fair we set out at 8 oClock & proceeded on verry well wind from the S.W. The enterpreters wife verry *sick* so much so that I move her into the back part of our covered part of the Perogue which is cool, her own situation being a verry hot one in the bottom of the Perogue exposed to the Sun. Saw emence N^o. of swallows in the 1st bluff on the Lar^d Side, water verry swift, the bluff are blackish clay & coal for about 80 feet, the earth above that for 30 or 40 feet is a brownish yellow, a number of bars of corse gravil and stones of different shape & size &^{c}. Saw a number of rattle snakes to day one of the men cought one by the head in catchi^g hold of a bush on which his head lay reclined three canoes were in great danger to day one diped water, another very near turning over &^{c}. at 2 oClock P M a fiew drops of rain I walked thro' a point and killed a Buck Elk & Deer, and we camped on the Star^d Side, the Interpreters woman verry sick one man have a fellon riseing on his hand one other with the Tooth ake has taken cold in the Jaw &^{c}.

Course & distance the 12th of June 1805

	mile	
S. 30° W.	1	to a point on the Lar^d Shore pass^d 3 Islands
South	1	to a Lar^d point of an Island
S. 60° E.	2	to a tree on the Lar^d Side, pass^d 2 Small Islands
N. 50° E	1	to an object in the Lar^d bend ops^d an Island
S. 50° E	1½	to a tree on the Lar^d Side pass^d the Isl^d
S. 10° W.	1	to a point on the Star^d Side
S. 40° W.	½	to a point of wood on the Star^d Side pass^d 2 Islands one small
S. 80° W	½	to a bluff point on Star^d Side pass^d a Isl^d
West	½	to the lower point of a small Island
S. 30° E.	1½	to a high black bluff in a bend Lar^d Side
S. 50° W.	1½	to a tree under a hill Lar^d Side passed four Islands two on each side
West	3	to the *grog* spring at the Star^d Side at which place the Little river which falls into the North fork is 100 yards distant
N. 45° E	1¾	to a low bluff on the Star^d Side pass^d a point on St^d & one on the Lar^d Side
East	1	to a Bluff on the Lard Side
West	¼	to a low Bluff at the upper part of a wood on the Star^d Side, opposit a Island. here we camped at a large Indian encampment about 12 months past
miles	18	

[Lewis:] *Thursday June 13th. 1805.*

This morning we set out about sunrise after taking breakfast off our venison and fish. we again ascended the hills of the river and gained the level country. the country through which we passed for the first six miles tho' more roling than that we had passed yesterday might still with propryety be deemed a level country; our course as yesterday was generally S.W. the river from the place we left it appeared to make a considerable bend to the South. from the extremity of this roling country I overlooked a most beatifull and level plain of great extent or at least 50 or sixty miles; in this there were infinitely more buffaloe than I had ever before witnessed at a view. nearly in the direction I had been travling or S.W. two curious mountains presented themselves of square figures, the sides rising perpendicularly to the hight of 250 feet and appeared to be formed of yellow clay; their tops appeared to be level plains; these inaccessible hights appeared like the ramparts of immence fortifications; I have no doubt but with very little assistance from art they might be rendered impregnable.[1] fearing that the river boar to the South and that I might pass the falls if they existed between this an[d] the snowey mountains I altered my course nea[r]ly to the South leaving those insulated hills to my wright and proceeded through the plain; I sent Feels on my right and Drewyer and Gibson on my left with orders to kill some meat and join me at the river where I should halt for dinner. I had proceded on this course about two miles with Goodrich at some distance behind me whin my ears were saluted with the agreeable sound of a fall of water and advancing a little further I saw the spray arrise above the plain like a collumn of smoke which would frequently dispear again in an instant caused I presumed by the wind which blew pretty hard from the S.W. I did not however loose my direction to this point which soon began to make a roaring too tremendious to be mistaken for any cause short of the great falls of the Missouri. here I arrived about 12 OClock having traveled by estimate about 15. Miles. I hurryed down the hill which was about 200 feet high and difficult of access, to gaze on this sublimely grand specticle. I took my position on the top of some rocks about 20 feet high opposite the center of the falls. this chain of rocks appear once to have formed a part of those over which the waters tumbled, but in the course of time has been seperated from it to the distance of 150 yards lying prarrallel to it and a butment against which the water after falling over the precipice beats with great fury; this barrier extends on the right to the perpendicular clift which forms that board [border] of the river, but to the distance of 120 yards next to the clift it is but a few feet above the level of the water, and here the water in very high tides appears to pass in a channel of 40 yds. next to the higher part of the ledg of rocks; on the left it extends within 80 or ninty yards of the lard. Clift which is also perpendicular; between this abrupt extremity of the ledge of rocks and the perpendicular bluff the whole body of water passes with incredible swiftness. immediately at the cascade the river is about 300 yds. wide; about ninty or a hundred yards of this next the Lard. bluff is a smoth even sheet of water falling over a precipice of at least eighty feet, the remaining part of about 200 yards on my right formes the grandest sight I ever beheld, the hight of the fall is the same of the other but the irregular and somewhat projecting rocks below receives the water in it's passage down and brakes it into a perfect white foam which assumes a thousand forms in a moment sometimes flying up in jets of sparkling foam to the hight of fifteen or twenty feet and are scarcely formed before large roling bodies of the same beaten and foaming water is thrown over and conceals them. in short the rocks seem to be most happily fixed to present a sheet of the whitest beaten froath for 200 yards in length and about 80 feet perpendicular. the water after decending strikes against the butment before mentioned or that on which I stand and seems to reverberate and being met by the more impetuous courant they roll and swell into half formed billows of great hight which rise and again disappear in an instant. this butment of rock defends a handsome little bottom of about three acres which is deversified and agreeably shaded with some cottonwood trees; in the lower extremity of the bottom there is a very thick grove of the same kind of trees which are small, in this wood there are several Indian lodges formed of sticks. a few small cedar grow near the ledge of rocks where I rest. below the point of these rocks at a small distance the river is divided by a large rock which rises several feet above the water, and extends downwards with the stream for about 20 yards. about a mile before the water arrives at the pitch it decends very rappidly, and is confined on the Lar^d side by a perpendicular clift of about 100 feet, on Star^d side it is also perpendicular for about three hundred yards above the pitch where it is then broken by the discharge of a small ravine, down which the buffaloe have a large beaten road to the water, (*Qu.*) for it is but in very few places that these anamals can obtain water near this place owing to the steep and inaccessible banks. I see several skelletons of the buffaloe lying in the edge of the water near the Star^d bluff which I presume have been swept down by the current and precipitated over this tremendious fall. about 300 yards below me there is another butment of solid rock with a perpendicular face and abo[u]t 60 feet high which projects from the Star^d side at right angles to the distance of 134 y^{ds} and terminates the lower part nearly of the bottom before mentioned; there being a passage arround the end of this butment between it and the river of about 20 yards; here the river again assumes it's usual width soon spreading to near 300 yards but still continues it's rappidity. from the reflection of the sun on the sprey or mist which arrises from these falls there is a beatifull rainbow produced which adds not a little to the beauty of this majestically grand senery. after wrighting this imperfect discription I again viewed the falls and was so much disgusted with the imperfect idea which it conveyed of the scene that I determined to draw my pen across it and begin agin, but then reflected that I could not perhaps succeed better than pening the first impressions of the mind; I wished for the pencil of Salvator Rosa [*a Titian*] or the pen of Thompson,[1] that I might be enabled to give to the enlightened world some just idea of this truly magnifficent and sublimely grand object, which has from the commencement of time been concealed from the view of civilized man; but this was fruitless and vain. I most sincerely regreted that I had not brought a crimee [camera] obscura with me by the assistance of which even I could have hoped to have done better but alas this was also out of my reach; I therefore with the assistance of my pen only indeavoured to trace some of the stronger features of this seen by the assistance of which and my recollection aided by some able pencil I hope still to give to the world some faint idea of an object which at this moment fills me with such pleasure and astonishment; and which of it's kind I will venture to ascert is second to but one in the known world. I retired to the shade of a tree where I determined to fix my camp for the present and dispatch a man in the morning to inform Capt. C. and the party of my success in finding the falls and settle in their minds all further doubts as to the Missouri. the hunters now arrived loaded with excellent buffaloe meat and informed me that they had killed three very fat cows about ¾ of a mile from hence. I directed them after they had refreshed themselves to go back and butcher them and bring another load of meat each to our camp determining to employ those who remained with me in drying meat for the party against their arrival. in about 2 hours or at 4 OClock P.M. they set out on this duty, and I walked down the river about three miles to discover if possible some place to which the canoes might arrive or at which they might be drawn on shore in order to be taken by land above the falls; but returned without effecting either of these objects; the river was one continued sene of rappids and cascades which I readily perceived could not be encountered with our canoes, and the Clifts still retained their perpendicular structure and were from 150 to 200 feet high; in short the river appears here to have woarn a channel in the process of time through a solid rock. on my return I found the party at camp; they had butchered the buffaloe and brought in some more meat as I had directed. Goodrich had caught half a douzen very fine trout and a number of both species of the white fish. these trout (*caught in the falls*) are from sixteen to twenty three inches in length, precisely resemble our mountain or speckled trout in form and the position of their fins, but the specks on these are of a deep black instead of the red or goald colour of those common to the U'. States. these are furnished long sharp teeth on the pallet and tongue and have generally a small dash of red on each side behind the front ventral fins; the flesh is of a pale yellowish red, or when in good order, of a rose red.[1]

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[1] These heights are now known as Square Butte and Crown Butte. — Ed.

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[1] A reference to James Thomson, author of "The Seasons." — ED.

I am induced to believe that the Brown, the white and the Grizly bear of this country are the same species only differing in colour from age or more probably from the same natural cause that many other anamals of the same family differ in colour. one of those which we killed yesterday was of a creem-coloured white while the other in company with it was of the common bey or r[e]dish brown, which seems to be the most usual colour of them. the white one appeared from it's tallons and teath to be the youngest; it was smaller than the other, and although a monstrous beast we supposed that it had not yet attained it's growth and that it was a little upwards of two years old. the young cubs which we have killed have always been of a brownish white, but none of them as white as that we killed yesterday. one other that we killed sometime since which I mentioned sunk under some driftwood and was lost, had a white stripe or list of about eleven inches wide entirely arround his body just behind the shoalders, and was much darker than these bear usually are. the grizly bear we have never yet seen. I have seen their tallons in possession of the Indians and from their form I am preswaded if there is any difference between this species and the brown or white bear it is very inconsiderable. There is no such anamal as a black bear in this open country or of that species generally denominated the black bear

My fare is really sumptuous this evening; buffaloe's humps, tongues and marrowbones, fine trout parched meal pepper and salt, and a good appetite; the last is not considered the least of the luxuries.

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[1] A variety of the *Salmo purpuratus*. — ED.

[Clark:] *June 13th Thursday 1805*

a fair morning, some dew this morning the Indian woman verry sick I gave her a doste of salts. we set out early, at a mile & ½ passed a small rapid stream on the Lar^{d} Side which heads in a mountain to the S.E 12 or 15 miles, which at this time is covered with Snow, we call this stream Snow river,[1] as it is the conveyance of the melted snow from that mountain at present. numbers of Gees & Goslings, the gees cannot fly at this season. goose berries are ripe and in great abundance, the yellow current is also common, not yet ripe killed a buffalow & camped on the Lar^{d} Side near an old Indian fortified camp one man sick & 3 with swellings, the Indian woman verry sick. Killed a goat & fraser 2 Buffalow

Course and distance June 13th 1805

	miles	
S. 45° W	1½	to the mouth of Snow river on the Lar^{d} Side ops^{d} an Island passed 2 Islands
S. 60° W.	1½	to the lower point of an Timber on the Star^{d} Side passed the Island
South	¼	on the Star^{d} Side to the point opposit a black slate bluff.
S 45° W.	¾	to the upper part of a wood Star^{d} Side
S. 20° W	1¼	to a black bluff on the Lar^{d} Side
S. 30° W	1	to the lower point of an Island
West	1¾	to a Bush on the Side of a bluff in the Star^{d} bend passed 2 Isld^{s} & a Lar^{d} point
S. 60° E	¾	to a hollow in the bluff in Lar^{d} bend passed 2 small Islands
South	¼	to a Lodge on a small Island
S. 80° W.	1	to the lower point of an Island
S. 40° W.	¼	to a stoney bluff Star^{d} Side, at the head of the Island a rapid across R
South	1¼	to a tree on a small Island in the Lar^{d} bend under a high hill passed 2 Islands
S. 70° W.	1½	to the Lower point of an Island passed 2 small Islands.
	13	Camped on the Lard Shore

The river verry rapid maney sholes great n^{os} of large stones, passed some bluffs or low cliffts of slate to day

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[1] Now Shonkin River, falling into the Missouri just below Fort Benton. — ED.

[Lewis:] *Friday June 14th 1805.*

This morning at sunrise I dispatched Joseph Fields with a letter to Capt. Clark and ordered him to keep sufficiently near the river to observe it's situation in order that he might be enabled to give Capt. Clark an idea of the point at which it would be best to halt to make our portage. I set one man about preparing a s[c]affold and collecting wood to dry the meat Sent the others to bring in the ballance of the buffaloe meat, or at least the part which the wolves had left us, for those fellows are ever at hand, and ready to partake with us the moment we kill a buffaloe; and there is no means of puting the meat out of their reach in those plains; the two men shortly after returned with the meat and informed me that the wolves had devoured the greater part of the meat. about ten O'Clock this morning while the men were engaged with the meat I took my Gun and espontoon and thought I would walk a few miles and see where the rappids termineated above, and return to dinner. accordingly I set out and proceeded up the river about S.W. after passing one continued rappid and three small cascades of ab[o]ut for or five feet each at the distance of about five miles I arrived at a fall of about 19 feet; the river is here about 400 yds. wide. this pitch which I called the crooked falls occupys about threefourths of the width of the river, commencing on the South side, extends obliquly upwards about 150 yds. then forming an accute angle extends downwards nearly to the commencement of four small Islands lying near the N. shore; among these Islands and between them and the lower extremity of the perpendicular pitch being a distance of 100 yards or upwards, the water glides down the side of a sloping rock with a volocity almost equal to that of it's perpendicular decent. just above this rappid the river makes a suddon bend to the right or Northwardly. I should have returned from hence but hearing a tremendious roaring above me I continued my rout across the point of a hill a few hundred yards further and was again presented by one of the most beatifull objects in nature, a cascade of about fifty feet perpendicular streching at rightangles across the river from side to side to the distance of at least a quarter of a mile. here the river pitches over a shelving rock, with an edge as regular and as streight as if formed by art, without a nich or brake in it; the water decends in one even and uninterupted sheet to the bottom wher dashing against the rocky bottom [it] rises into foaming billows of great hight and rappidly glides away, hising flashing and sparkling as it departs the sprey rises from one extremity to the other to $50^{f.}$ I now thought that if a skillfull painter had been asked to make a beautifull cascade that he would most probably have p[r]esented the precise immage of this one; nor could I for some time determine on which of those two great cataracts to bestoe the palm, on this or that which I had discovered yesterday; at length I determined between these two great rivals for glory that this was *pleasingly beautifull*, while the other was *sublimely grand.* I had scarcely infixed my eyes from this pleasing object before I discovered another fall above at the distance of half a mile; thus invited I did not once think of returning but hurried thither to amuse myself with this newly discovered object. I found this to be a cascade of about 14 feet possessing a perpendicular pitch of about 6 feet. this was tolerably regular streching across the river from bank to bank where it was about a quarter of a mile wide; in any other neighbourhood but this, such a cascade would probably be extoled for it's bea[u]ty and magnifficence, but here I passed it by with but little attention; determining as I had proceded so far to continue my rout to the head of the rappids if it should even detain me all night. at every rappid cateract and cascade I discovered that the bluffs grew lower or that the bed of the river rose nearer to a level with the plains. still pursuing the river with it's course about S.W. passing a continued sene of rappids and small cascades, at the distance of 2½ miles I arrived at another cataract of 26 feet. this is not immediately perpendicular, a rock about ⅓ of it's decent seems to protrude to a small distance and receives the water in it's passage downwards and gives a curve to the water tho' it falls mostly with a regular and smoth sheet. the river is near six hundred yards wide at this place, a beatifull level plain on the S. side only a few feet above the level of the pitch, on the N. side where I am the country is more broken and immediately behind me near the river a high hill. below this fall at a little distance a beatifull little Island well timbered is situated about the middle of the river. in this Island on a Cottonwood tree an Eagle has placed her nest; a more inaccessable spot I beleive she could not have found; for neither man nor beast dare pass those gulphs which seperate her little domain from the shores. the water is also broken in such manner as it decends over this pitch that the mist or sprey rises to a considerable hight. this fall is certainly much the greatest I ever behald except those two which I have mentioned below. it is incomparably a g[r]eater cataract and a more noble interesting object than the celibrated falls of Potomac or Soolkiln [Schuylkill] &c. just above this is another cascade of about 5 feet, above which the water as far as I could see began to abate of it's volosity, and I therefore determined to ascend the hill behind me which promised a fine prospect of the adjacent country, nor was I disappointed on my arrival at it's summit. from hence I overlooked a most beatifull and extensive plain reaching from the river to the base of the Snowclad mountains to the S. and S. West; I also observed the missoury streching it's meandering course to the South through this plain to a great distance filled to it's even and grassey brim; another large river flowed in on it's Western side about four miles above me and extended itself th[r]ough a level and fertile valley of 3 miles in width a great distance to the N.W. rendered more conspicuous by the timber which garnished it's borders. in these plains and more particularly in the valley just below me immence herds of buffaloe are feeding. the missouri just above this hill makes a bend to the South where it lies a smoth even and unruffled sheet of water of nearly a mile in width bearing on it's watry bosome vast flocks of geese which feed at pleasure in the delightfull pasture on either border. the young geese are now completely feathered except the wings which both in the young and old are yet deficient. after feasting my eyes on this ravishing prospect and resting myself a few minutes I determined to procede as far as the river which I saw discharge itself on the West side of the Missouri convinced that it was the river which the Indians call *medecine river* and which they informed us fell into the Missouri just above the falls. I decended the hill and directed my course to the bend of the Missouri near which there was a herd of at least a thousand buffaloe; here I thought it would be well to kill a buffaloe and leave him untill my return from the river and if I then found that I had not time to get back to camp this evening to remain all night here there being a few sticks of drift wood lying along shore which would answer for my fire, and a few s[c]attering cottonwood trees a few hundred yards below which would afford me at least the semblance of a shelter. under this impression I scelected a fat buffaloe and shot him very well, through the lungs; while I was gazeing attentively on the poor anamal discharging blood in streams from his mouth and nostrils, expecting him to fall every instant, and having entirely forgotten to reload my rifle, a large white, or reather brown bear, had perceived and crept on me within 20 steps before I discovered him; in the first moment I drew up my gun to shoot, but at the same instant recolected that she was not loaded and that he was too near for me to hope to perform this opperation before he reached me, as he was then briskly advancing on me; it was an open level plain, not a bush within miles nor a tree within less than three hundred yards of me; the river bank was sloping and not more than three feet above the level of the water; in short there was no place by means of which I could conceal myself from this monster untill I could charge my rifle; in this situation I thought of retreating in a brisk walk as fast as he was advancing untill I could reach a tree about 300 yards below me, but I had no sooner terned myself about but he pitched at me, open mouthed and full speed, I ran about 80 yards and found he gained on me fast, I then run into the water the idea struk me to get into the water to such debth that I could stand and he would be obliged to swim, and that I could in that situation defend myself with my espontoon; accordingly I ran haistily into the water about waist deep, and faced about and presented the point of my espontoon, at this instant he arrived at the edge of the water within about 20 feet of me; the moment I put myself in this attitude of defence he sudonly wheeled about as if frightened, declined the combat on such unequal grounds, and retreated with quite as great precipitation as he had just before pursued me. as soon as I saw him run of[f] in that manner I returned to the shore and charged my gun, which I had still retained in my hand throughout this curious adventure. I saw him run through the level open plain about three miles, till he disappeared in the woods on medecine river; during the whole of this distance he ran at full speed, sometimes appearing to look behind him as if he expected pursuit. I now began to reflect on this novil occurrence and indeavoured to account for this sudden retreat of the bear. I at first thought that perhaps he had not smelt me bofore he arrived at the waters edge so near me, but I then reflected that he had pursued me for about 80 or 90 yards before I took [to] the water and on examination saw the grownd toarn with his tallons immediately on the imp[r]ession of my steps; and the cause of his allarm still remains with me misterious and unaccountable. so it was and I felt myself not a little gratifyed that he had declined the combat. my gun reloaded I felt confidence once more in my strength; and determined not to be thwarted in my design of visiting medecine river, but determined never again to suffer my peice to be longer empty than the time she necessarily required to charge her. I passed through the plain nearly in the direction which the bear had run to medecine river,[1] found it a handsome stream, about 200 y^ds^ wide with a gentle current, apparently deep, it's waters clear, and banks which were formed principally of dark-brown and blue clay were about the hight of those of the Missouri or from 3 to 5 feet; yet they had not the appearance of ever being overflown, a circumstance, which I did not expect so immediately in the neighbourhood of the mountains, from whence I should have supposed, that sudden and immence torrants would issue at certain seasons of the year; but the reverse is absolutely the case. I am therefore compelled to beleive that the snowey mountains yeald their warters slowly, being partially effected every day by the influence of the sun only, and never suddonly melted down by haisty showers of rain.

having examined Medecine river I now determined to return, having by my estimate about 12 miles to walk. I looked at my watch and found it was half after six P.M. in returning through the level bottom of Medecine river and about 200 yards distant from the Missouri, my direction led me directly to an anamal that I at first supposed was a wolf; but on nearer approach or about sixty paces distant I discovered that it was not, it's colour was a brownish yellow; it was standing near it's burrow, and when I approached it thus nearly, it couched itself down like a cat looking immediately at me as if it designed to spring on me. I took aim at it and fired, it instantly disappeared in it's burrow; I loaded my gun and ex[a]mined the place which was dusty and saw the track from which I am still further convinced that it was of the tiger kind.[1] whether I struck it or not I could not determine, but I am almost confident that I did; my gun is true and I had a steady rest by means of my espontoon, which I have found very serviceable to me in this way in the open plains. It now seemed to me that all the beasts of the neighbourhood had made a league to distroy me, or that some fortune was disposed to amuse herself at my expence, for I had not proceded more than three hundred yards from the burrow of this tyger cat, before three bull buffaloe, which wer feeding with a large herd about half a mile from me on my left, seperated from the herd and ran full speed towards me, I thought at least to give them some amusement and altered my direction to meet them; when they arrived within a hundred yards they mad[e] a halt, took a good view of me and retreated with precipitation. I then continued my rout homewards passed the buffaloe which I had killed, but did not think it prudent to remain all night at this place which really from the succession of curious adventures wore the impression on my mind of inchantment; at sometimes for a moment I thought it might be a dream, but the prickley pears which pierced my feet very severely once in a while, particularly after it grew dark, convinced me that I was really awake, and that it was necessary to make the best of my way to camp. it was sometime after dark before I returned to the party; I found them extremely uneasy for my safety; they had formed a thousand conjectures, all of which equally forboding my death, which they had so far settled among them, that they had already agreed on the rout which each should take in the morning to surch for me. I felt myself much fortiegued, but eat a hearty supper and took a good night's rest. the weather being warm I had left my leather over shirt and had woarn only a yellow flannin one.

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[1] Now known as Sun River. — ED.

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[1] Possibly this was a wolverene or carcajou (*Gulo luscus*); it may have been the cougar (*Felix concolor*). — Ed.

[Clark:] *June 14th Friday 1805*

a fine morning the Indian woman complaining all night & excessively bad this morning. her case is somewhat dangerous. two men with the Tooth ake 2 with Tumers, & one man with a Tumor & a slight fever passed the camp Capt. Lewis made the 1st night at which place he had left part of two bear their skins &c. three men with Tumers went on shore and stayed out all night one of them killed 2 buffalow, a part of which we made use of for brackfast, the current excesevely rapid more so as we assend we find great dificuelty in getting the Perogue & canoes up in safety, canoes take in water frequently, at 4 oClock this evening Jo: Fields returned from Capt. Lewis with a letter for me, Capt Lewis dates his letter from the Great falls of the Missouri, which Fields informs me is about 20 miles in advance & about 10 miles above the place I left the river the time I was up last week Capt L informs the [me] that those falls, in part answer the discription given of them by the Indians, much higher the Eagles nest which they describe is there, from those signs he is convinced of this being the river the Indians call the Missouri, he intends examineing the river above untill my arrival at a point from which we can make a portage, which he is apprehensive will be at least 5 miles & both above & below there is several small pitches, & swift troubled water we made only 10 miles to day and camped on the Lard Side, much hard slate in the clifts & but a small quantity of timber.

Course & Distance June 14th

	miles	
S. 35° W.	2	to a small Island in the Lard bend passing Sundery bad places
S. 55° W.	1	to a tree on the Lard Side opsd a bluff passed a Island near Std Side
N. 70° W.	1	to the Lard point passing an Island
West	1	to a tree in the bend Stard Side
South	¼	to a clift on the Lard Side at a rapid
West	1	to the pt on the Lard Side
S. 45° W.	¼	to the upper pt of a small Isld in a Stard bend opposit a large Island
S. 10° W.	1¼	to naked point on the Stard Side
S. 70° W.	¼	to my old camp of the 4th inst: on the Stard Side opsd a large graveley Bar.
South	1½	to the upper point of an Island
S. 56° W.	½	on the Stard Side to a bluff
S. 60° W.	¼	to a wood on the Lard point & Camped.
miles	10¼	

[Lewis:] *Saturday June 15th 1805.*

This morning the men again were sent to bring in some more meat which Drewyer had killed yesterday, and continued the opperation of drying it. I amused myself in fishing, and sleeping away the fortiegues of yesterday. I caught a number of very fine trout which I made goodrich dry; goodrich also caught about two douzen and several small cat of a yellow colour which would weigh about 4 lbs. the tail was seperated with a deep angular nitch like that of the white cat of the missouri from which indeed they differed only in colour. when I awoke from my sleep today I found a large rattlesnake coiled on the leaning trunk of a tree under the shade of which I had been lying at the distance of about ten feet from him. I killed the snake and found that he had 176 scuta on the abdomen and 17 half formed scuta on the tale; it was of the same kinde which I had frequently seen before; they do not differ in their colours from the rattle-snake common to the middle atlantic states, but considerably in the form and figures of those colours. This evening after dark Joseph Fields returned and informed me that Capt Clark had arrived with the party at the foot of a rappid about 5 miles below which he did not think proper to ascend and would wait my arrival there. I had discovered from my journey yesterday that a portage on this side of the river will be attended by much difficulty in consequence of several deep ravenes which intersect the plains (*Qu.*) nearly at right angles with the river to a considerable distance, while the South side appears to be a deligh[t]full smoth unbroken plain; the bearings of the river also make it p[r]obable that the portage will be shorter on that side than on this. I directed Fields to return early in the morning to Capt. C. and request him to send up a party of men for the dryed meat which we had made. I finde a very heavy due on the grass about my camp every morning which no doubt procedes from the mist of the falls, as it takes place no where in the plains nor on the river except here.

[Clark:] *June the 15th Satturday 1805*

a fair morning and worm, we set out at the usial time and proceeded on with great dificuelty as the river is more rapid we can hear the falls this morning verry distinctly. our Indian woman sick & low spirited I gave her the bark & apply it exteranely to her region which revived her much. the current excessively rapid and dificuelt to assend great numbers of dangerous places, and the fatigue which we have to encounter is incretiatable the men in the water from morning untill night hauling the cord & boats walking on sharp rocks and round sliperery stones which alternately cut their feet & throw them down, notwith standing all this dificuelty they go with great chearfulness, aded to those dificuelties the rattle snakes [are] inumerable & require great caution to prevent being bitten. we passed a small river on the Lard Side about 30 yards wide verry rapid which heads in the mountains to the S.E. I sent up this river 5 miles, it has some timber in its bottoms and a fall of 15 feet at one place, above this river the bluffs are of red earth mixed with stratums of black stone, below this little [river], we pass a white clay which mixes with water like flour in every respect, the Indian woman much wors this evening, she will not take any medison, her husband petetions to return &c., river more rapid late in the evening we arrived at a rapid which appeared so bad that I did not think it prudent to attempt passing of it this evening as it was now late, we saw great numbers of Gees Ducks, crows Blackbirds &c. Geese & Ducks with their young. after Landing I detached Joseph Fields to Cap^{t} Lewis to let him know where I was &c. river rises a little this evening we could not get a sufficency of wood for our use

	miles	Course & Distance June 15th.
South	1½	to a point on the Star^{d} Side
S. 28°. W.	2¼	to a rock resembling a tour [tower] in the Star^{d} bend
S. 10°. E.	1¾	to the Star^{d} point passing a rapid
S. 60°. W.	¾	to a tree in the St^{d} bend rocks & rapids all the dis^{t}
South	¾	to some bushes on a Lar^{d} point passed a large Creek at ½ a mile on the Lar^{d} Side which we called Shield's Creek[1]
S. 10°. E.	1½	to the Star^{d} point
S. 50°. W.	1	to a point on the Lar^{d} Side
South	1¼	to the Star^{d} point opposit an Island opposit a Bluff
S. 10°. W.	1¼	to the point (a few trees) Lar^{d} Side at a rapid, passed red bluffs & camped on the Star^{d} Side
S. 10°. W.	¾	to the foot of a rapid at which place we comm[enc]ed the portage, formed a camp & unloaded on the Lar^{d} Side
	12¾	

[Lewis:] *Sunday June 16th. 1805.*

J. Fields set out early on his return to the lower camp, at noon the men arrived and shortly after I set out with them to rejoin the party, we took with us the dryed meat consisting of about 600 lb^{s} and several douzen of dryed trout. about 2 P.M. I reached the camp found the Indian woman extreemly ill and much reduced by her indisposition. this gave me some concern as well for the poor object herself, then with a young child in her arms, as from the consideration of her being our only dependence for a friendly negociation with the Snake Indians on whom we depend for horses to assist us in our portage from the Missouri to the columbia river. I now informed Capt. C. of my discoveries with rispect to the most proper side for our portage, and of it's great length, which I could not estimate at less than 16 miles. Capt. C. had already sent two men this morning to examine the country on the S. side of the river; he now passed over with the party to that side and fixed a camp about a mile b[e]low the entrance of a Creek where there was a sufficient quantity of wood for fuel, an article which can be obtained but in few places in this neighbourhood. after discharging the loads four of the canoes were sent back to me, which by means of strong ropes we hawled above the rappid and passed over to the south side from whence the water not being rappid we can readily convey them into the creek by means of which we hope to get them on the high plain with more ease. one of the small canoes was left below this rappid in order to pass and repass the river for the purpose of hunting as well as to procure the water of the Sulpher spring, the virtues of which I now resolved to try on the Indian woman. this spring is situated about 200 yards from the Missouri on the N.E. side nearly opposite to the entrance of a large creek; it discharges itself into the Missouri over a precepice of rock about 25 feet, forming a pretty little [blank space in MS.][1] the water is as transparent as possible strongly impreganted with sulpher, and I suspect Iron also, as the colour of the hills and bluffs in the neighbourhood indicate the existence of that metal. the water to all appearance is precisely similar to that of Bowyer's Sulpher spring in Virginia. Capt. Clark determined to set out in the morning to examine (the country) and survey the portage, and discover the best rout. as the distance was too great to think of transporting the canoes and baggage on the men's shoulders, we scelected six men, and ordered them to look out some timber this evening, and early in the morning to set about making a parsel of truck wheels in order to convey our canoes and baggage over the portage. we determined to leave the white perogue at this place, and substitute the Iron boat, and also to make a further deposit of a part of our stores. in the evening the men who had been sent out to examine the country [returned] and made a very unfavourable report. they informed us that the creek just above us and two deep ravenes still higher up cut the plain between the river and mountain in such a manner, that in their opinions a portage for the canoes on this side was impracticable. g[o]od or bad we must make the portage. notwithstanding this report I am still convinced from the view I had of the country the day before yesterday that a good portage may be had on this side at least much better than on the other, and much nearer also. I found that two dozes of barks and opium which I had given her since my arrival had produced an alteration in her pulse for the better; they were now much fuller and more regular. I caused her to drink the mineral water altogether. w[h]en I first came down I found that her pulse were scarcely perceptible, very quick frequently irregular and attended with strong nervous symptoms, that of the twitching of the fingers and leaders of the arm; now the pulse had become regular much fuller and a gentle perspiration had taken place; the nervous symptoms have also in a great measure abated, and she feels herself much freer from pain. she complains principally of the lower region of the abdomen, I therefore continued the cataplasms of barks and laudnumn which had been previously used by my friend Capt. Clark. I beleive her disorder originated principally from an obstruction of the mensis in consequence of taking could. I determined to remain at this camp in order to make some celestial observations, restore the sick woman, and have all matters in a state of readiness to commence the portage immediately on the return of Capt. Clark, who now furnished me with the dayly occurrences which had taken place with himself and party since our seperation which I here enter in his own words.[1]

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[1] Now Highwood Creek, one of the streams draining the mountains of that name. — Ed.

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[1] The word "cataract" was written at this place, but afterward erased. — Ed.

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[1] Here Lewis transcribed the entries from Clark's Journal, for June 11–16, 1805. As we publish these from Clark-Voorhis note-book No. 1, the Lewis transcripts are omitted. — Ed.

[Clark:] *June 16th of Sunday 1805*

Some rain last night a cloudy morning wind hard from the S.W. we set out passed the rapid by double manning the Perogue & canoes and halted at ¼ of a mile to examine the rapids above, which I found to be an continued *cascade* for as far as could be seen which was about 2 miles, I walked up on the Lard Side as high as a large Creek, which falls in on the Lard. Side one mile above & opposit a large Sulpher Spring which falls over the rocks on the Std. Side the wind rored from the S.W. hard & some rain, at about 2 oClock Capt Lewis joined me from the falls 5 miles distant, & infd that the Lard Side was the best portage I despatched 2 men this morning on the Lard Side to examine the Portage. the Indian woman verry bad, & will take no medisin what ever, untill her husband finding her out of her sences, easyly provailed on her to take medison, if she dies it will be the fault of her husband as I am now convinced. we crossed the river [the] after part of the day and formed a camp from which we intended to make the first portage, Capt. Lewis stayed on the Std Side to direct the canoes over the first riffle 4 of them passed this evening the others unloaded & part of the Perogue Loading taken out. I deturmined to examine & survey the Portage find a leavel rout if possible. The 2 men despatched to examine the Portage gave an unfavourable account of the Countrey, reporting that the Creek & 2 deep reveens cut the Prarie in such a manner between the river and mountain as to render a portage in their oppinion for the Canoes impossible. we selected 6 men to make wheels & to draw the canoes on as the distance was probably too far for to be carried on the mens sholders

[Lewis:] *Monday June 17th. 1805.*

Capt. Clark set out early this morning with five me[n] to examine the country and survey the river and portage as had been concerted last evening. I set six men at work to p[r]epare four sets of truck wheels with couplings, toungs and bodies, that they might either be used without the bodies for transporting our canoes, or with them in transporting our baggage I found that the Elk skins I had prepared for my boat were insufficient to compleat her, some of them having become dammaged by the weather and being frequently wet; to make up this deficiency I sent out two hunters this morning to hunt Elk; the ballance of the party I employed first in unloading the white perogue, which we intend leaving at this place, and bring the whole of our baggage together and arranging it in proper order near our camp. this duty being compleated I employed them in taking five of the small canoes up the creek which we now call portage creek[1] about 1¾ miles; here I had them taken out and lyed in the sun to dry. from this place ther is a gradual ascent to the top of the high plain to which we can now take them with ease; the bluffs of this creek below and those of the river above it's entrance are so steep that it would be almost impracticable to have gotten them on the plain. we found much difficulty in geting the canoes up this creek to the distance we were compelled to take them, in consequence of the rappids and rocks which obstruct the channel of the creek. one of the canoes overset and was very near injuring 2 men essentially. just above the canoes the creek has a perpendicular fall of 5 feet and the cliffts again become very steep and high. we were fortunate enough to find one cottonwood tree just below the entrance of portage creek that was large enough to make our carrage wheels about 22 Inchis in diameter; fortunate I say because I do not beleive that we could find another of the same size perfectly sound within 20 miles of us. the cottonwood which we are obliged to employ in the other parts of the work is extreemly illy calculated for it being soft and brittle. we have made two axeltrees of the mast of the white perogue, which I hope will answer tolerably well tho' it is reather small. The Indian woman much better today; I have still continued the same course of medecine; she is free from pain clear of fever, her pulse regular, and eats as heartily as I am willing to permit her of broiled buffaloe well seasoned with pepper and salt and rich soope of the same meat; I think therefore that there is every rational hope of her recovery. saw a vast number of buffaloe feeding in every direction arround us in the plains, others coming down in large herds to water at the river; the fragments of many carcases of these poor anamals daily pass down the river, thus mangled I p[r]esume in decending those immence cataracts above us. as the buffaloe generally go in large herds to water and the passages to the river about the falls are narrow and steep the hi[n]der part of the herd press those in front out of their debth and the water insta[n]tly takes them over the cataracts where they are instantly crushed to death without the possibility of escaping. in this manner I have seen ten or a douzen disappear in a few minutes. their mangled carcases ly along the shores below the falls in considerable quantities and afford fine amusement for the bear wolves and birds of prey; this may be one reason and I think not a bad one either that the bear are so tenatious of their right of soil in this neighbourhood.

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[1] The present Belt Mountain Creek, draining the mountains thus named. — ED.

[Clark:] *June 17th Monday 1805.*

a fine morning wind as usial Capt. Lewis with the party unloaded the Perogue & he determined to keep the party employed in getting the loading to the creek about 1 mile over a low hill in my absence on the Portage.

I set out with 5 men at 8 oClock, and proseeded on up the creek some distance to examine that & if possable assend that sufficently high, that a streight cours to the mouth of medison river would head the 2 reveens, the creek I found confined rapid and shallow [g]eneralley[1] passed through an open roleing Prarie, so as to head the two riveens after heading two we steared our course so as to strike the river below the great pitch on our course to the river crossed a Deep riveen near its mouth with steep clifts this riveen had running water which was very fine, the river at this place is narrow & confined in perpendicular clifts of 170 feet from the tops of those clifts the countrey rises with a steep assent for about 250 feet more we proceeded up the river passing a succession of rapids & cascades to the Falls, which we had herd for several miles makeing a dedly sound I beheld those cateracts with astonishment the whole of the water of this great river confined in a channel of 280 yards and pitching over a rock of 97 feet ¾ of an [inch], from the foot of the falls arrises a continued mist which is extended for 150 y^{ds} down & to near the top of the clifts on L. S^{d}. the river below is confined [in] a narrow Chan^{l}. of 93 yards leaveing a small bottom of timber on the Star^{d} Side which is defended by a rock, rangeing cross wise the river a little below the Shoot [chute], a short distance below this cateract a large rock divides the stream. I in desending the clifts to take the hite of the fall was near slipping into the water, at which place I must have been sucked under in an instant, and with dificuelty and great risque I assended again, and decended the clift lower down (but few places can be decended to the river) and took the hite with as much accurecy as possible with a Sperit Leavels &^{c}. dined at a fine spring 200 yards below the pitch near which place 4 cotton willow trees grew. on one of them I marked my name the date, and hight of the falls, we then proceeded on up the river passing a continued cascade & rapid to a fall of 19 feet at 4 small Islands, this fall is diaguanally across the river from the Lar^{d} Side, forming an angle of ¾ of the width from the Lar^{d}. from which side it pitchs for ⅔ of that distance; on the Star^{d}. Side is a rapid decline, below this Shoot a Deep reveen falls in in [which] we camped for the night which was cold (The mountains in every derection has snow on them) The plain to our left is leavel We saw one Bear & inumerable numbers of Buffalow, I saw 2 herds of those animals watering imedeately above a considerable rapid, they decended by a narrow pass &^{c} the bottom small, the river forced those forw^{d}. into the water some of which was taken down in an instant, and seen no more others made shore with dificuelty. I beheld 40 or 50 of those swiming at the same time those animals in this way are lost and accounts for the number of buffalow carcases below the rapids.

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[1] Clark here inserts field-notes of his survey of the Great Falls of the Missouri, which are transferred to "Scientific Data," given in vol. v. — Ed.

[Lewis:] *Tuesday June 18th 1805.*

This morning I employed all hands in drawing the perogue on shore in a thick bunch of willow bushes some little distance below our camp; fastened her securely, drove out the plugs of the gage holes of her bottom and covered her with bushes and driftwood to shelter her from the sun. I now scelected a place for a cash and set t[h]ree men at work to complete it, and employed all others except those about the waggons, in overhawling airing and repacking our indian goods ammunicion, provision and stores of every discription which required inspection. examined the frame of my Iron boat and found all the parts complete except one screw, which the ingenuity of Sheilds can readily replace, a resource which we have very frequent occasion for. about 12 O'Ck the hunters returned; they had killed 10 deer but no Elk. I begin to fear that we shall have some difficulty in procuring skins for the boat. I wo[u]ld prefer those of the Elk because I beleive them more durable and strong than those of the Buffaloe, and that they will not shrink so much in drying. we saw a herd of buffaloe come down to water at the sulpher spring this evening, I dispatched some hunters to kill some of them, and a man also for a cask of mineral water. the hunters soon killed two of them in fine order and returned with a good quantity of the flesh, having left the remainder in a situation that it will not spoil provided the wolves do not visit it. The waggons are completed this evening, and appear as if they would answer the purpose very well if the ax[l]etrees prove sufficiently strong. the wind blew violently this evening, as they frequently do in this open country where there is not a tree to brake or oppose their force. The Indian woman is recovering fast she set up the greater part of the day and walked out for the fi[r]st time since she arrived here; she eats hartily and is free from fever or pain. I continue same course of medecine and regimen except that I added one doze of 15 drops of the oil of vitriol today about noon.

There is a species of goosberry which grows very common about here in open situations among the rocks on the sides of the clifts. they are now ripe of a pale red colour, about the size of a common goosberry, and like it is an ovate pericarp of soft pulp invelloping a number of smal whitish coloured seeds; the pulp is a yello[w]ish slimy muselaginous substance of a sweetish and pinelike tast, not agreeable to me. the surface of the berry is covered with a glutinous adhesive matter, and the frut altho' ripe retains it's withered corollar. this shrub seldom rises more than two feet high and is much branched; the leaves resemble those of the common goosberry only not so large; it has no thorns. the berry is supported by seperate peduncles or footstalks of half an inch in length.[1] immence quantities of small grasshoppers of a brown colour in the plains, they no doubt contribute much to keep the grass as low as we find it which is not generally more than three inches, the grass is a narrow leaf, soft, and affords a fine pasture for the Buffaloe.

[Clark:] *June 18th Tuesday 1805*

we set out early and arrived at the second great cateract a[t] about 200 yds above the last of 19 feet pitch. this is one of the grandest views in nature and by far exceeds any thing I ever saw, the Missouri falling over a shelveing rock for 47 feet 8 Inches with a cascade &c. of 14 feet 7 Inches above the shoot for a ¼ mile I decended the clift below this cateract with ease measured the hight of the purpendicular fall of 47 feet 8 Inches at which place the river is 473 yards wide as also the hight of the cascade &c. a continual mist quite across this fall after which we proceeded on up the river a little more than a mile to the largest fountain or spring I ever saw, and doubt if it is not the largest in America known, this water boils up from under the rocks near the edge of the river and falls imediately into the river 8 feet, and keeps its colour for ½ a mile which is emencely clear and of a bluish cast, proceeded on up the river passed a succession of rapids to the next great fall of 26 feet 5 Inches river 580 yards wide this fall is not intirely perpenducular a short bench gives a curve to the water as it falls a butifull small Island at the foot of this fall near the center of the channel covered with trees, the Missouri at this fall is [blank space in MS.] yards wide, a considerable mist rises at this fall ocasionally, from this pitch to the head of the rapids is one mile & has a fall of 20 feet, this is also a handsom Scenery a fall in an open leavel plain, after takeing the hight & measureing the river proceeded on, saw a gange of Buffalow swiming the river above the falls, several of which was drawn in to the rapids and with dificuelty made shore half drowned, we killed one of those Cows & took a[s] much meat as we wished. emence herds of those animals in every direction, passed 2 groves in the Point just above the rapids & dined in one opposit the mouth of Medison River, which falls in on the Star.d Side and is 137 yards wide at its mouth the Missouri above is 300 yards wide, as the river [Missouri] appears to bear S Easterley I assended about 4 miles high to a creek which appeared to head in South mountains[1] passed a Island of [omission in MS.] and a little timber in an Easterly bend at 1 mile, passed some timber in a point at 2 mile at or near the lower point of a large Island on which we shot at a large white *bear* passed a small Island in the middle and one close on the Lar.d Shore at 3 miles behind the head of which we camped those 3 Islands are all opposit, soon after we camped two ganges of Buffalow crossed one above & the other below we killed 7 of them & a calf and saved as much of the best of the meet as we could this evening, one man A. Willard going for a load of meat at 170 yards distance on an Island was attact by a white bear and verry near being caught, prosued within 40 yards of camp where I was with one man I collected 3 others of the party and prosued the bear (who had prosued my track from a buffalow I had killed on the Island at about 300 yards distance and chance[d] to meet Willard) for fear of his attacking one man Colter at the lower point of the Island, before we had got down the bear had allarmed the man and prosued him into the water, at our approach he retreated, and we relieved the man in the water, I saw the bear but the bushes was so thick that I could not shoot him and it was nearly dark, the wind from the S W & cool killed a beaver & an elk for their skins this evening.

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[1] A member of the *Ribes* family, known as *R. cereum* Dougl. — C. V. PIPER.

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[1] Now called Sand Coulée; it comes from the Little Belt Mountains, and on it is a town of the same name (Sandcoulee, Cascade County, Mont.). — Ed.

[Lewis:] *Wednesday June 19th 1805.*

This morning I sent over several men for the meat which was killed yesterday, a few hours after they returned with it, the wolves had not discovered it. I also dispatched George Drewyer Reubin Fields and George Shannon on the North side of the Missouri with orders to proceed to the entrance of Medecine river and indeavour to kill some Elk in that neighbourhood. as there is more timber on that river than the Missouri I expect that the Elk are more plenty. The cash completed today. The wind blew violently the greater part of the day. the Indian woman was much better this morning she walked out and gathered a considerable quantity of the white apples of which she eat so heartily in their raw state, together with a considerable quantity of dryed fish without my knowledge that she complained very much and her fever again returned. I rebuked Sharbono severely for suffering her to indulge herself with such food he being privy to it and having been previously told what she must only eat. I now gave her broken dozes of diluted nitre untill it produced perspiration and at 10 P.M. 30 drops of laudnum which gave her a tolerable nights rest. I amused myself in fishing several hours today and caught a number of both species of the white fish, but no trout nor Cat. I employed the men in making up our baggage in proper packages for transportation; and waxed the stoppers of my powder canesters anew. had the frame of my Iron boat clensed of rust and well greased. in the evening the men mended their mockersons and prepared themselves for the portage. After dark my dog barked very much and seemed extreemly uneasy which was unusual with him; I ordered the serg.t of the guard to reconniter with two men, thinking it possible that some Indians might be about to pay us a visit, or perhaps a white bear; he returned soon after & reported that he believed the dog had been baying a buffaloe bull which had attempted to swim the river just above our camp but had been beten down by the stream landed a little below our camp on the same side & run off.

Observed Meridian Altitude of ⊙'s L. L. with Octant by the back observation	53° 15′ —″
Latitude deduced from this observation	47° 8′ 59″ ·5

[Clark:] *June 19th Wednesday 1805*

We went on the Island to hunt the white bear this morning but could not find him, after plotting my courses &c. I deturmined to dry the meat we killed and leave here, and proceed up the river as far as it bent to the S.E and examine a small creek above our camp, I set out and found the creek only contained back water for 1 mile up, assend near the Missouri 3 miles to the bend, from which place it turned Westerly, from this bend I with 2 men went foward towards the camp of the party to examine the best ground for the portage, the little creek has verry extencive bottoms which spread out into a varriety of leavel rich bottoms quite to the mountains to the East, between those bottoms is hills low and stoney on their declivity where it is steep. I returned to camp late and deturmined that the best nearest and most eassy rout would be from the lower part of the 3rd or white bear Islands, the wind all this day blew violently hard from the S W. off the snowey mountains, cool, in my last rout I lost a part of my notes which could not be found as the wind must have blown them to a great distance. summer duck setting great numbers of buffalow all about our camp.

[Lewis:] *Thursday June 20th 1805.*

This morning we had but little to do; waiting the return of Capt. Clark; I am apprehensive from his stay that the portage is longer than we had calculated on. I sent out 4 hunters this morning on the opposite side of the river to kill buffaloe; the country being more broken on that side and cut with ravenes they can get within shoot of the buffaloe with more ease and certainty than on this side of the river. my object is if possible while we have now but little to do, to lay in a large stock of dryed meat at this end of the portage to subsist the party while engaged in the transportation of our baggage &c, to the end, that they may not be taken from this duty when once commenced in order to surch for the necessary subsistence. The Indian woman is qu[i]te free from pain and fever this morning and appears to be in a fair way for recovery, she has been walking about and fishing. In the evening 2 of the hunters returned and informed me that they had killed eleven buffaloe eight of which were in very fine order, I sent off all hands immediately to bring in the meat they soon returned with about half of the best meat leaving three men to remain all night in order to secure the ballance. the buffaloe are in immence numbers, they have been constantly coming down in large herds to water opposite to us for some hours sometimes two or three herds wartering at the same instant, and scarcely disappear before others supply their places. they appear to make great use of the mineral water, whether this be owing to it's being more convenient to them than the river or that they actually prefer it I am at a loss to determine for they do not use it invaryably, but sometimes pass at no great distance from it and water at the river. brackish water or that of a dark colour impregnated with mineral salts such as I have frequen[t]ly mentioned on the Missouri is found in small quantities in some of the steep ravenes on the N. side of the river opposite to us and the falls. Capt. Clark and party returned late this evening when he gave me the following relation of his rout and the occurrences which had taken place with them since their departure.[1]

Capt. Clark now furnished me with the field notes of the survey which he had made of the Missouri and it's Cataracts cascades &c. from the entrance of portage Creek to the South Eastwardly bend of the Missouri above the White bear Islands, which are as follows. [For this survey, see "Scientific Data," Vol. V. — Ed.]

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[1] Here follows Lewis's transcript of Clark's journal, June 17–20, 1805, which has been omitted as we give the original entries from Clark-Voorhis note-book No. 1. — Ed.

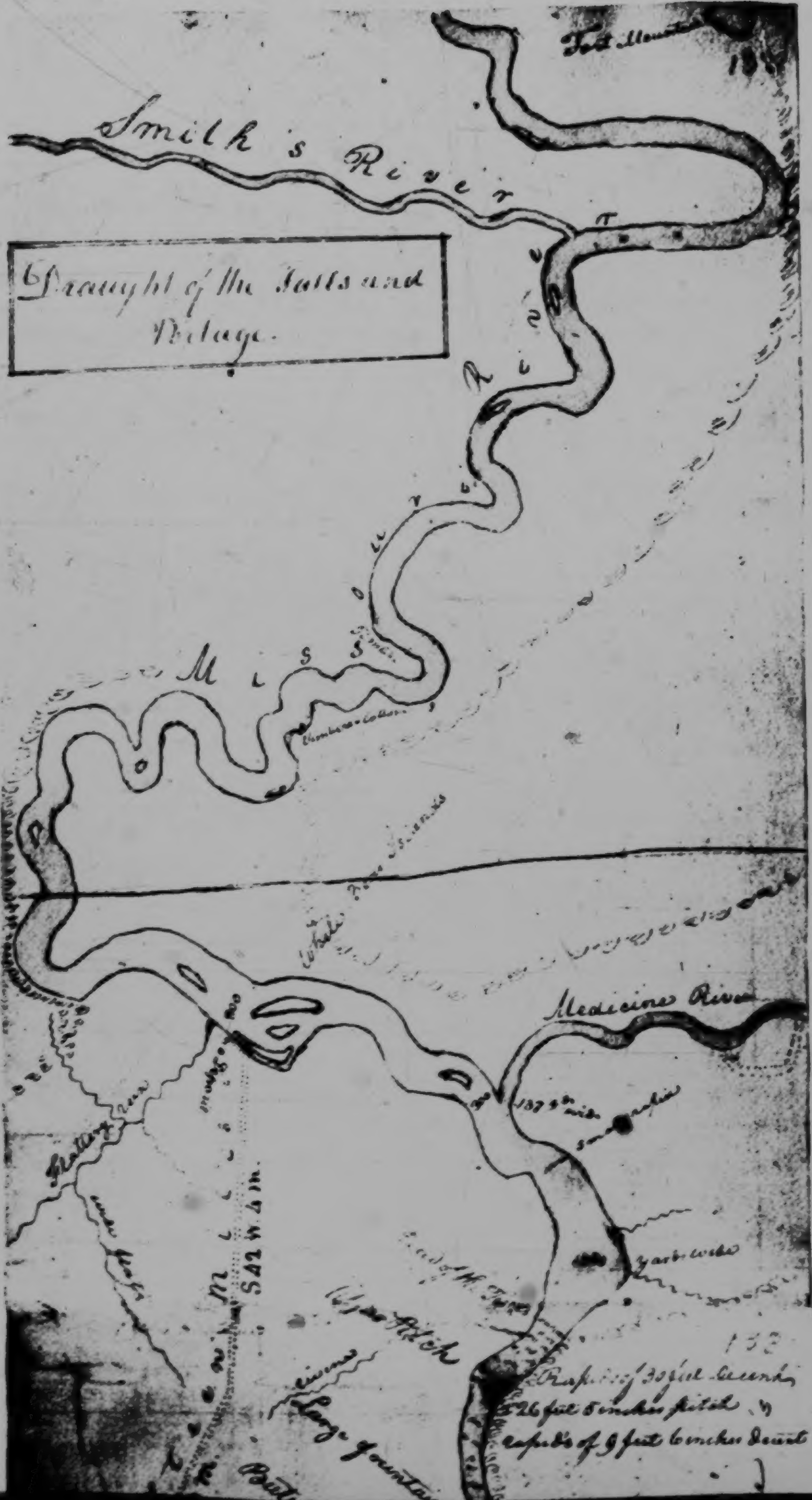
June 20th 1805. At our camp below the entrance of portage creek
observed Meridian Altd of ☉'s L. L. with Octant by the back Observn } 53° 10'.
Latitude deduced from this observation 47° 7'. 10" .3

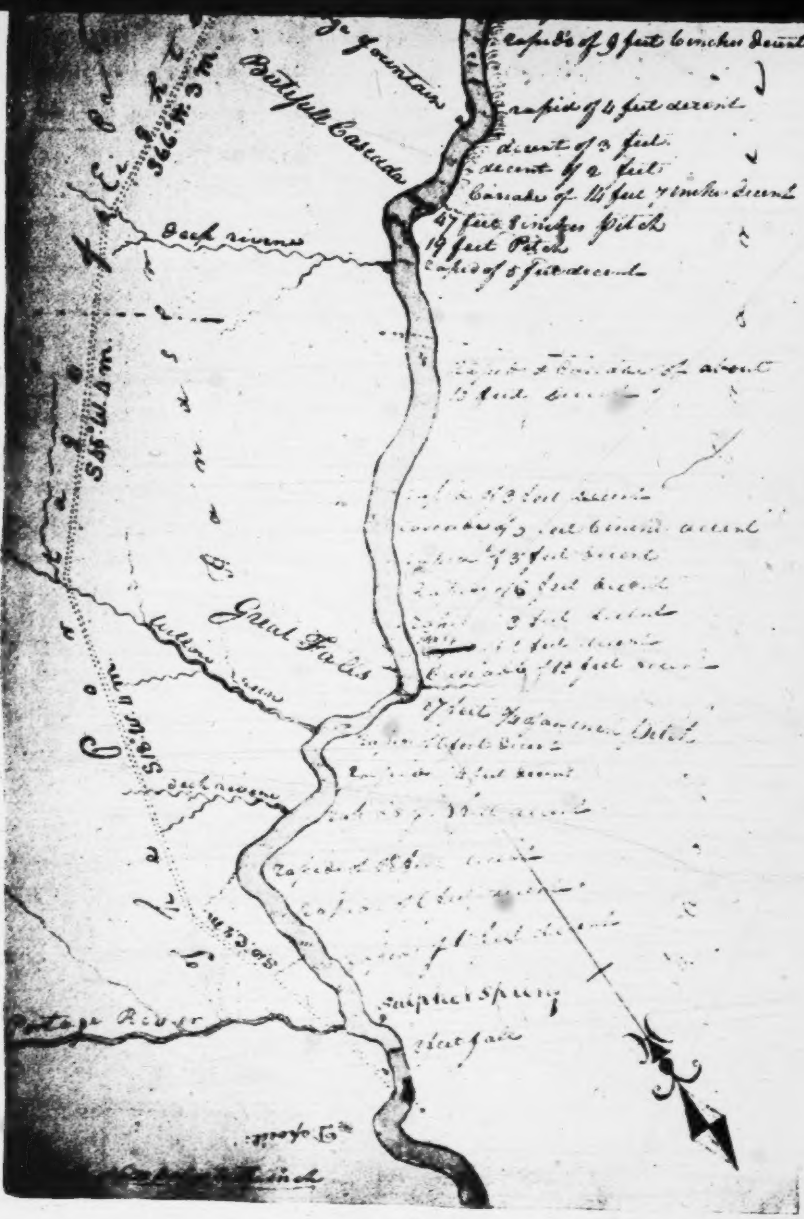
[Clark:] *June 20th Thursday 1805*

a cloudy morning a hard wind all night and this morning, I direct stakes to be cut to stick up in the prarie to show the way for the party to transport the baggage &c. &c. we set out early on the portage, soon after we set out it began to rain and continued a short time we proceeded on thro' a tolerable leavel plain, and found the hollow of a Deep riveen to obstruct our rout as it could not be passed with canos & baggage for some distance above the place we struck it. I examined it for some time and finding it late deturmined to strike the river & take its Course & distance to camp which I accordingly did the wind hard from the S. W. a fair after noon, the river on both sides cut with raveens some of which is passes thro steep clifts into the river, the countrey above the falls & up the Medison river is leavel, with low banks, a chain of mountains to the west some part of which particller those to the N W. & S W are covered with snow and appear verry high. I saw a rattle snake in an open plain 2 miles from any creek or woods. When I arrived at camp found all well with great quantites of meet, the canoes Capt Lewis had carried up the Creek 1¾ miles to a good place to assend the land & taken up. Not haveing seen the Snake Indians or knowing in fact whither to calculate on their friendship or hostillity, we have conceived our party sufficiently small, and therefore have concluded not to dispatch a canoe with a part of our men to St. Louis as we have entended early in the Spring. we fear also that such a measure might also discourage those who would in such case remain, and migh[t] possibly hazard the fate of the expedition. We have never hinted to any one of the party that we had such a scheem in contemplation, and all appear perfectly to have made up their minds to Succeed in the expedition or perish in the attempt. We all believe that we are about to enter on the most perilous and dificuelt part of our Voyage, yet I see no one repineing; all appear ready to meet those dificuelties which await us with resolution and becomeing fortitude.

We had a heavy dew this morning. the clouds near those mountains rise suddenly and discharge their contents partially on the neighbouring Plains; the same cloud discharge hail alone in one part, hail and rain in another and rain only in a third all within the space of a fiew miles; and on the mountains to the South & S.E. of us sometimes snow. at present there is no snow on those mountains; that which covered them a fiew days ago has all disappeared. the Mountains to the N.W. and West of us are still entirely covered are white and glitter with the reflection of the sun. I do not believe that the clouds that pervale at this season of the year reach the summits of those lofty mountains; and if they do the probability is that they deposit snow only for there has been no proceptable diminution of the snow which they contain since we first saw them. I have thought it probable that these mountains might have derived their appellation of *Shineing Mountains*, from their glittering appearance when the sun shines in certain directions on the snow which cover them.

Dureing the time of my being on the Plains and above the falls I as also all my party repeatedly heard a nois which proceeded from a Direction a little to the N. of West, a loud [noise] and resembling precisely the discharge of a piece of ordinance of 6 pounds at the distance of 5 or six miles. I was informed of it several times by the men J: Fields particularly before I paid any attention to it, thinking it was thunder most probably which they had mistaken. at length walking in the plains yesterday near the most extreem S. E bend of the River above the falls I heard this *nois* very distinctly, it was perfectly calm clear and not a cloud to be seen, I halted and listened attentively about two hour[s] dureing which time I heard two other discharges, and took the direction of the sound with my pocket compass which was as nearly West from me as I could estimate from the sound. I have no doubt but if I had leasure I could find from whence it issued. I have thought it probable that it might be caused by running water in some of the caverns of those emence mountains, on the principal of the


Draught of the Falls and Portage.
Fort Mountain
Smith's River
Missouri River
Whitebear Islands
Medicine River
yards wide
S 42 W 4 m.
Upper Pitch
Large fountain
Rapids of 30 feet descent
26 feet 5 inches pitch
rapids of 9 feet 6 inches descent


rapid's of 9 feet 6 inches decent
Fountain
Beautifull Cascade
rapid of 4 feet decent
decent of 3 feet
decent of 2 feet
Cascade of 14 feet 7 inches decent
47 feet 8 inches pitch
19 feet Pitch
rapid of 5 feet decent
Deep rivene
S66°W. 3 m.
S58°W. 4 m.
Great Falls
willow run
Portage River
sulpher Spring

The Great Falls and Portage of the Missouri River, from Lewis's note book.

blowing caverns; but in such case the sounds would be periodical and regular, which is not the case with this, being sometimes heard once only and at other times several discharges in quick succession. it is heard also at different times of the day and night. I am at a great loss to account for this Phenomenon. I well recollect hereing the Minitarees say that those Rocky mountains make a great noise, but they could not tell me the cause, neither could they inform me of any remarkable substance or situation in these mountains which would autherise a conjecture of a probable cause of this noise. it is probable that the large river just above those Great falls which heads in the derection of the noise has taken it's name *Medicine river* from this unaccountable rumbling sound, which like all unacountable thing[s] with the Indians of the Missouri is called *Medicine.*

The Ricaras inform us of the black mountains makeing a simalar noise &c. &c. and maney other wonderfull tales of those Rocky mountains and those great falls.

June 20th at our Camp below the enterance of Portage River observed
Meridian altitude of ⊙: L.L. with Octant by the back observation } 53°. 10'. 0".
Latitude deduced from the observation 47°. 7'. 10" 3/10

CHAPTER XI

PORTAGING AROUND THE GREAT FALLS

Lewis's Journal, June 21–July 14, 1805
Clark's Journal, June 21–July 14

[Lewis:] *Friday June* 21st 1805.

THIS morning I employed the greater part of the men in transporting a part of the bagage over portage creek to the top of the high plain about three miles in advance on the portage. I also had one canoe carryed on truck wheles to the same place and put the baggage in it, in order to make an early start in the morning, as the rout of our portage is not yet entirely settled, and it would be inconvenient to remain in the open plain all night at a distance from water, which would probably be the case if we did not set out early as the latter part of the rout is destitute of water for about 8 miles. having determined to go to the upper part of the portage tomorrow, in order to prepare my boat and receive and take care of the stores as they were transported, I caused the Iron frame of the boat and the necessary tools my private baggage and Instruments to be taken as a part of this load, also the baggage of Joseph Fields, Sergt. Gass and John sheilds, whom I had scelected to assist me in constructing the leather boat. Th[r]ee men were employed today in shaving the Elk skins which had ben collected for the boat. the ballance of the party were employed in cuting the meat we had killed yesterday into thin fletches and drying it, and in bring[ing] in the ballance of what had been left over the river with three men last evening. I readily preceive several difficulties in preparing the leather boat which are the want of convenient and proper timber, bark, skins, and above all that of pitch to pay her seams, a deficiency that I really know not how to sur-

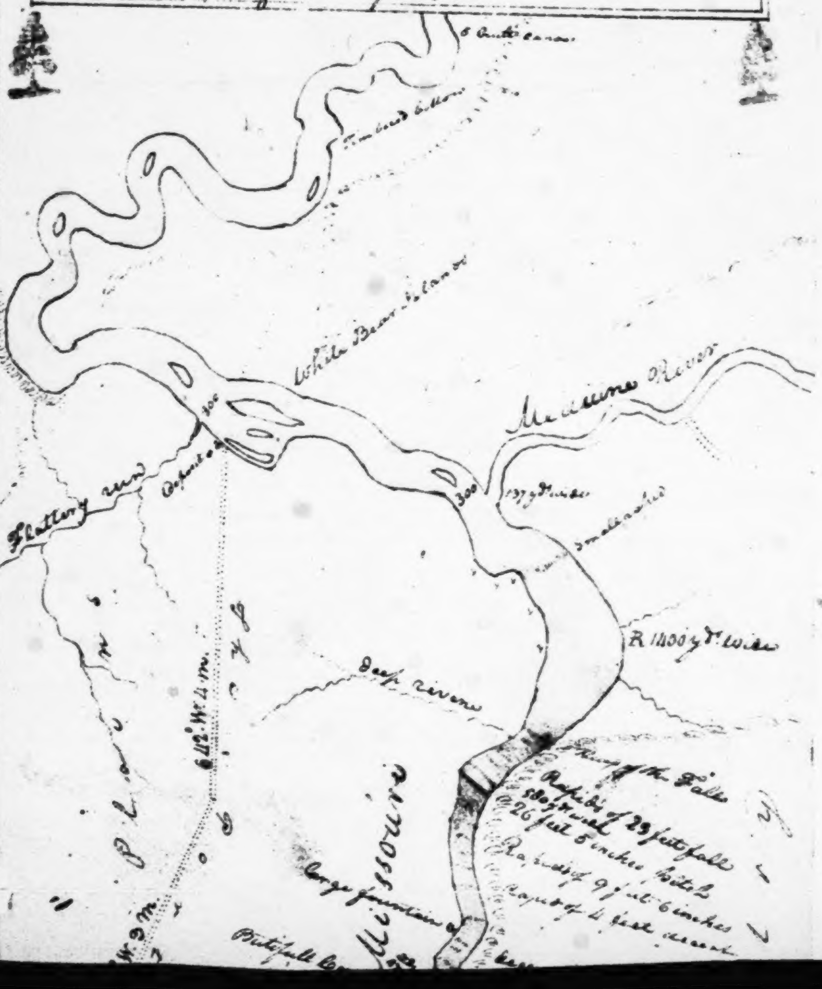
☞ from this Survey and estimate it results, that the Missouri experiences a decent of 360 feet 2 inches and 3/4 in the distance of Miles and Poles ——

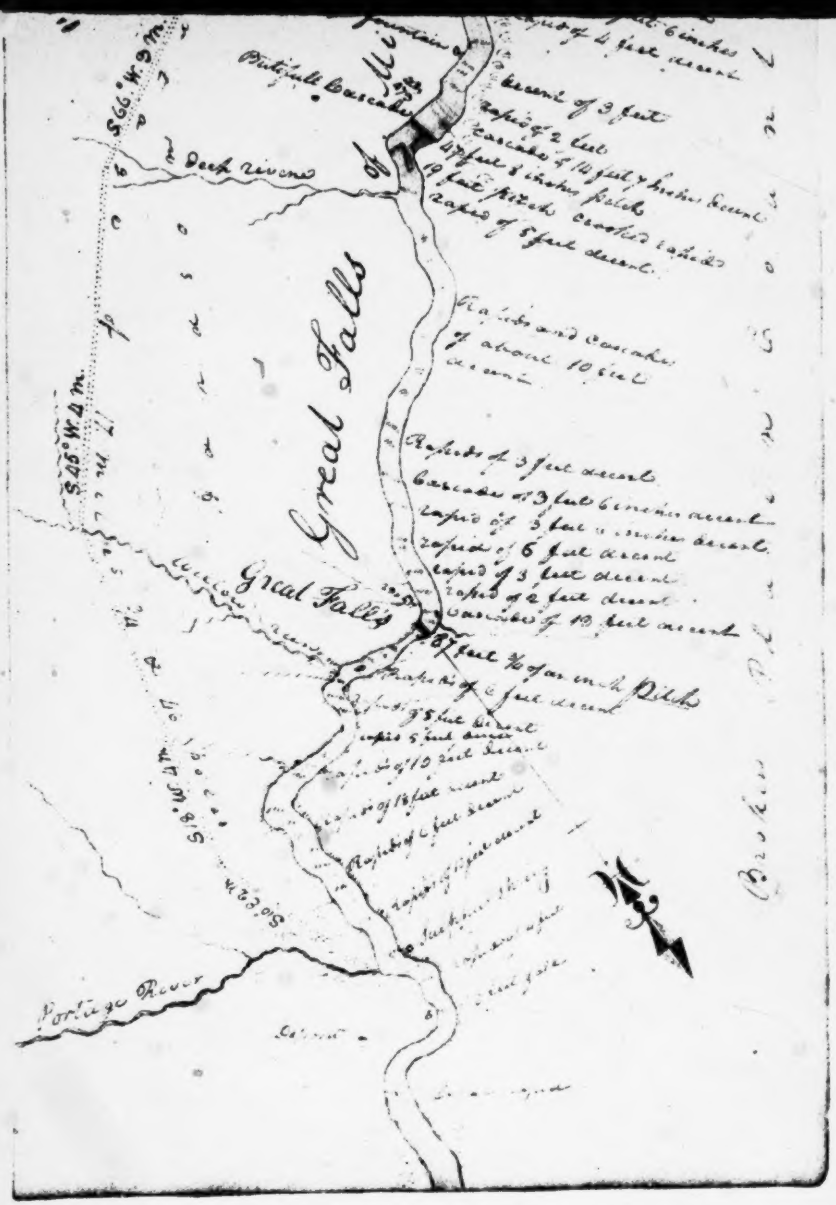
June 20th at our Camp below the enterance of Portage River Observed Meridian altitude of ☉'s L. L. with Octant by the back observation } 53°. 10' 0"

Latitude deduced from this Observation 47° 7' 10 3/10

Draught of the Falls and Portage of the Missouri

Laid down by a Scale of 600 poles to the inch


6 Buttle canoes
Timbered bottom
White Bear Islands
Medicine River
300
300
Flattery run
Deposit
137 yds wide
Small creek
R 1400 yds wide
Deep river
Plains
S. 42° W. 4 m.
W. 3 m.
Spring of the Falls
Rapids of 23 feet fall
580 yds wide
26 feet 5 inches pitch
Rapids of 9 feet 6 inches
Rapid of 4 feet decent
Large fountain
Butifull Ca
Missouri


fountain
feet 6 inches
rapid of 4 feet decent
Butifull Cascade
decent of 3 feet
rapid of 2 feet
Cascade of 14 feet 7 inches decent
47 feet 8 inches pitch
19 feet pitch crooked rapids
rapid of 5 feet decent.
Rapids and Cascades of about 10 feet decent
Rapids of 3 feet decent
Cascade of 3 feet 6 inches decent
rapid of 6 feet decent
rapid of 3 feet decent
rapid of 2 feet decent
Cascade of 18 feet decent
87 feet ¾ of an inch Pitch
Rapids of 6 feet decent
rapid 5 feet decent
Rapids of 6 feet decent
Great Falls
of Mi
Great Falls
Deep rivene
S 66° W 3 m.
S 45° W 4 m.
S 18° W 4 m.
Portage River
Broken Plains

The Great Falls and Portage of the Missouri River, from Clark's note-book.

mount unless it be by means of tallow and pounded charcoal which mixture has answered a very good purpose on our wooden canoes heretofore. I have seen for the first time on the Missouri at these falls, a species of fishing ducks with white wings, brown and white body and the head and part of the neck adjoining of a brick red, and the beak narrow; which I take to be the same common to James river, the Potomac and Susquehanna.[1] immence numbers of buffaloe comeing to the river as usual. the men who remained over the river last night killed several mule deer, and Willard who was with me killed a young Elk. The wind blew violently all day. The growth of the neighbourhood what little there is consists of the broad and narrow leafed cottonwood, box alder, the large or sweet willow, the narrow and broad leafed willow. the sweet willow has not been common to the Missouri below this or the entrance of Maria's river; here [it] attains to the same size and in appearance much the same as in the Atlantic States. the undergrowth consists of rosebushes, goosberry and current bushes, honeysuckle small, and the red wood, the inner bark of which the engages are fond of smoking mixed with tobacco.

[Clark:] *June 21st Friday 1805*

a fine morning wind from the SW. off the mountains and hard, Capt Lewis with the men except a few take a part of the baggage & a Canoe up the Hill 3 mile in advance, several men employed in shaveing & graneing Elk hides for the Iron boat as it is called. 3 men were sent up the Medison river yesterday to kill Elk for the skins for the boat, I fear that we shall be put to some dificuelty in precureing Elk skins sufficent, cloudy afternoon, we dry meat for the men to eat on their return from the upper part of the portage. Capt Lewis determine to proceed to the upper part of the Portage tomorrow & with 3 men proceed to fix the Iron boat with skins &c. &c.

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[1] Doubtless the same duck, known to science as *Mergus serrator*. — Ed.

[Lewis:] *Saturday June 22nd 1805.*

This morning early Capt. Clark and myself with all the party except Sergt. Ordway Sharbono, Goodrich, York and the Indian woman, set out to pass the portage with the canoe and baggage to the Whitebear Island, where we intend that this portage shall end. Capt. Clarke piloted us through the plains. about noon we reached a little stream about 8 miles on the portage where we halted and dined; we were obliged here to renew both axeltrees and the tongues and howns of one set of wheels which took us no more than 2 hours. these parts of our carriage had been made of cottonwood and one axe[l]tree of an old mast, all of which proved deficient and had broken down several times before we reached this place we have now renewed them with the sweet willow and hope that they will answer better. after dark we had reached within half a mile of our intended camp when the tongues gave way and we were obliged to leave the canoe, each man took as much of the baggage as he could carry on his back and proceeded to the river where we formed our encampment much fortiegued. the prickly pears were extreemly troublesome to us sticking our feet through our mockersons. Saw a great number of buffaloe in the plains, also immence quantities of little birds and the large brown curloo; the latter is now seting; it lays it's eggs, which are of a p[a]le blue with black specks, on the ground without any preperation of a nest. there is a kind of larke here that much resembles the bird called the oldfield lark with a yellow brest and a black spot on the croop; tho' this differs from ours in the form of the tail which is pointed being formed of feathers of unequal length; the beak is somewhat longer and more curved and the note differs considerably; however in size, action, and colours there is no perceptable difference; or at least none that strikes my eye. after reaching our camp we kindled our fires and examined the meat which Capt. Clark had left, but found only a small proportion of it, the wolves had taken the greater part. we eat our suppers and soon retired to rest.

[Clark:] *June 22nd Saturday 1805*

a fine morning Capt Lewis my self and all the party except a Serjeant Ordway Guterich and the Interpreter and his wife Sar-car-gah-we-â (who are left at camp to take care of the baggage left) across the portage with one canoe on truck wheels and loaded with a part of our baggage I piloted thro the plains to the camp I [made] at which place I intended the portage to end which is 3 miles above the medesin River we had great dificuelty in getting on as the axeltree broke several times, and the cuppling tongus of the wheels, which was of cotton & willow, the only wood except Boxelder & [blank space in MS.] that grow in this quarter, we got within half a mile of our intended camp much fatigued at dark, our tongus broke & we took a load to the river on the mens back, where we found a number of wolves which had distroyed a great part of our meat which I had left at that place when I was up day before yesterday. we soon went to sleep & slept sound wind from the [blank space in MS.] we deturmine to employ every man cooks & all on the portage after to day.

[Lewis:] *Sunday June 23rd 1805.*

This morning early I scelected a place for the purpose of constructing my boat, near the water under some shady willows. Capt. Clark had the Canoe and baggage brought up, after which we breakfasted and nearly consumed the meat which he had left her[e]. he now set out on his return with the party. I employed the three men with me in the forenoon clearing away the brush and forming our camp, and puting the frame of the boat together. this being done I sent Shields and Gass to look out for the necessary timber, and with J. Fields decended the river in the canoe to the mouth of Medicine river in surch of the hunters whom I had dispatched thither on the 19th inst. and from whom we had not heard a sentence. I entered the mouth of Medicine river and ascended it about half a mile when we landed and walked up the Stard. side. frequently [w]hooping as we went on in order to find the hunters; at length after ascending the river about five miles we found Shannon who had passed the Medecine river & fixed his camp on the Lar^{d} side, where he had killed seven deer and several buffaloe and dryed about 600 lb^{s} of buffaloe meat; but had killed no Elk. Shannon could give me no further account of R. Fields and Drewyer than that he had left them about noon on the 19th at the great falls and had come on [to] the mouth of Medicine river to hunt Elk as he had been directed, and never had seen them since. the evening being now far spent I thought it better to pass the Medicine river and remain all night at Shannon's camp; I passed the river on a raft which we soon constructed for the purpose. the river is here about 80 y^{ds} wide, is deep and but a moderate current. the banks low as those of the Missouri above the falls yet never appear to overflow. as it will give a better view of the transactions of the party, I shall on each day give the occurences of both camps during our seperation as I afterwards learnt those of the lower camp from Cap^{t} Clark. on his return today he cut of[f] several angles of the rout by which we came yesterday, shortened the portage considerably; measured it and set up stakes throughout as guides to marke the rout. he returned this evening to the lower camp in sufficient time to take up two of the canoes from portage creek to the top of the plain about a mile in advance. this evening the men repaired their mockersons, and put on double souls to protect their feet from the prickley pears. during the late rains the buffaloe have troden up the praire very much which having now become dry the sharp points of earth as hard as frozen ground stand up in such abundance that there is no avoiding them. this is particular[l]y severe on the feet of the men who have not only their own weight to bear in treading on those hacklelike points, but have also the addition of the burthen which they draw and which in fact is as much as they can possibly move with. they are obliged to halt and rest frequently for a few minutes, at every halt these poor fellows tumble down and are so much fortiegued that many of them are asleep in an instant; in short their fatiegues are incredible; some are limping from the soreness of their feet, others faint and unable to stand for a few minutes, with heat and fatiegue, yet no one complains, all go with cheerfullness. in evening Reubin Fields returned to the lower camp and informed Cap^{t} Clark of the absence of Shannon, with rispect to whome they were extreemly uneasy. Fields and Drewyer had killed several buffaloe at the bend of the missouri above the falls and had dryed a considerable quantity of meat; they had also killed several deer but no Elk.

[Clark:] *June 23rd Sunday 1805*

a cloudy morning wind from the S.E. after getting the Canoe to camp & the articles left in the plains we eate brackfast of the remaining meat found in camp & I with the party the truck wheels & poles to stick up in the prarie as a guide, set out on our return, we proceeded on, & measured the way which I streightened considerably from that I went on yesterday, and arrived at our lower camp in sufficent time to take up 2 canoes on the top of the hill from the creek, found all safe at camp the men mended their mockersons with double soles to save their feet from the prickley pear, (which abounds in the Praries,) and the hard ground which in some & maney places [is] so hard as to hurt the feet verry much, the emence number of Buffalow after the last rain has trod the flat places in such a manner as to leave it uneaven, and that has tried [dried] and is worst than frozen ground, added to those obstructions, the men has to haul with all their strength wate & art, maney times every man all catching the grass & knobes & stones with their hands to give them more force in drawing on the Canoes & Loads, and notwithstanding the coolness of the air in high presperation and every halt, those not employed in reparing the course, are asleep in a moment, maney limping from the soreness of their feet some become fant for a fiew moments, but no man complains all go chearfully on. to state the fatigues of this party would take up more of the journal than other notes which I find scercely time to set down. I had the best rout staked out and measured which is 17 miles ¾ to the river & ½ a mile up i.e. 18¼ miles Portage. from the lower rapid to the 1st creek is 286 poles, to a Deep run of water, called *willow run* is 6 miles thence to the river 3 miles above medison river at 3 Islands called *White Bear* Islands is 11 miles all prarie without wood or water except at the creeks & run which afford a plenty of fine water and a little wood the plain is tolerably leavel except at the river a small assent & passing a low hill from the creek a rough & steep assent for about ¼ of a mile and several gullies & a gradual hill for 1½ miles the heads of several gullies which have short assents & the willow run of a steep hill on this run grows Purple & red Currents. the red is now ripe the Purple full grown, an emence number of Prarie burds now sitting of two kinds one larger than a Sparrow dark yellow the center feathers of its tail yellow & the out sides black some streeks about its neck, the other about the same size [with] white tail

[Lewis:] *Monday June 24th 1805.*

Supposing that Drewyer and R. Fields might possibly be still higher up medicine river, I dispatched J. Fields up the river with orders to proceede about four miles and then return whether he found them or not and join Shannon at this camp. I set out early and walked down the South West side of the river and sent Shannon down the opposite side to bring the canoe over to me and put me across the Missouri; having landed on the Lard side of the Missouri I sent Shannon back with the canoe to meet J. Fields and bring the dryed meat at that place to the camp at the white bear Islands which [he] accomplished and arrived with Fields this morning the party also arrived this evening with two canoes from the lower camp. they were wet and fatiegued, gave them a dram. R. Fields came with them and gave me an account of his & Drewyer's hunt, and informed me that Drewyer was still at their camp with the meat they had dryed. the iron frame of my boat is 36 feet long 4½ F. in the beam and 26 Inches in the hole.

This morning early Capt Clark had the remaining canoe drawn out of the water; and divided the remainder of our baggage into three parcels, one of which he sent today by the party with two canoes. The Indian woman is now perfectly recovered. Capt C. came a few miles this morning to see the party under way and returned. on my arrival at the upper camp this morning, I found that Sergᵗ Gass and Shields had made but slow progress in collecting timber for the boat; they complained of great difficulty in geting streight or even tolerably streight sticks of 4½ feet long. we were obliged to make use of the willow and box alder, the cottonwood being too soft and brittle. I kept one of them collecting timber while the other shaved and fitted them. I have found some pine logs among the drift wood near this place, from which, I hope to obtain as much pitch as will answer to pay the seams of the boat. I directed Fraizer to remain in order to sew the hides together, and form the covering for the boat.

[Clark:] *June 24ᵗʰ Monday 1805*

A cloudy morning I rose early had the remaining canoe hauled out of the water to dry and devided the baggage into 3 parcels, one of which the party took on their backs & one waggon with truck wheels to the canoes 3 miles in advance (Those canoes or 5 of our canoes were carried up the creek 1¾ of a mile taken out on the bank and left to dry from which place they are taken up a point and [that] intersects this rout from the mouth of the creek at 3 miles from the foot of the rapids) after getting up their loads they devided men & load & proceeded on with 2 canoes on truck wheels as before, I accompaned them 4 miles and returned, my feet being verry sore from the walk over ruts stones & hills & thro the leavel plain for 6 days proceeding carrying my pack and gun. Some few drops of rain in the fore part of the day, at 6 oClock a black cloud arose to the N West, the wind shifted from the S to that point and in a short time the earth was entirely covered with hail, some rain succeeded, which continued for about an hour very moderately on this side of the river, without the earths being wet ½ an inch, the riveens on the opposit or N W. Side discharged emence torrents of water into the river, & showed evidently that the rain was much heavyer on that side, some rain at different times in the night which was worm. Thunder without lightning accompanied the hail cloud

[Lewis:] *Tuesday June 25th. 1805.*

This morning early I sent the party back to the lower camp; dispatched Frazier down with the canoe for Drewyer and the meat he had collected, and Joseph Fields up the Missouri to hunt Elk. at eight OClk. sent Gass and Shields over to the large Island for bark and timber. about noon Fields returned and informed me that he had seen two white bear near the river a few miles above and in attempting to get a shoot [at] them had stumbled uppon a third which immediately made at him being only a few steps distant; that in runing in order to escape from the bear he had leaped down a steep bank of the river on a stony bar where he fell cut his hand bruised his knees and bent his gun, that fortunately for him the bank hid him from the bear when he fell and that by that means he had escaped. this man has been truly unfortunate with these bear, this is the second time that he has narrowly escaped from them. about 2 P.M. Shields and Gass returned with but a small quantity of both bark and timber and informed me that it was all they could find on the Island; they had killed two Elk the skins of which and a part of the flesh they brought with them. in the evening Drewyer and Frazier arrived with about 800 lbs. of excellent dryed meat and about 100 lbs. of tallow. The river is about 800 yds. wide opposite to us above these islands, and has a very gentle current the bottoms are ha[n]dsome level and extensive on both sides; the bank on this side is not more than 2 feet (*Qu*) above the level of the water; it is a pretty little grove in which our camp is situated. there is a species of wild rye which is now heading it rises to the hight of 18 or 20 inches, the beard is remarkably fine and soft it is a very handsome grass the culm is jointed and is in every rispect the wild rye in minuture. great quantities of mint also are here it resemble[s] the pepper mint very much in taste and appearance. the young black-birds which are almost innumerable in these islands just begin to fly. see a number of water tarripens.[1] I have made an unsuccessfull attempt to catch fish, and do not think there are any in this part of the river. The party that returned this evening to the lower camp reached it in time to take one canoe on the plain and prepare their baggage for an early start in the morning after which such as were able to shake a foot amused themselves in dancing on the green to the music of the violin which Cruzatte plays extreemly well. Capt. C. somewhat unwell today. he made Charbono kook for the party against their return. it is worthy of remark that the winds are sometimes so strong in these plains that the men informed me that they hoisted a sail in the canoe and it had driven her along on the truck wheels. this is really sailing on dry land.

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[1] The water-terrapin is doubtless *Emys elegans* of Maximilian. Coues identifies the wild rye as *Elymus sitanion*; the mint as *Mentha canadensis*. — ED.

[Clark:] *June 25th Tuesday 1805*

a fair worm morning, clouded & a few drops of rain at 5 oClock A.M. fair I feel my self a little unwell with a looseness &c. &c. put out the stores to dry & set Chabonah &c. to cook for the party against their return he being the only man left on this side with me. I had a little coffee for brackfast which was to me a necessity as I had not tasted any since last winter. The wind from the N.W. & worm. This countrey has a romantick appearance river inclosed between high and steep hills cut to pices by revines but little timber and that confined to the Rivers & creek, the Missouri has but a fiew scattering trees on its borders, and only one solitary cotton tree in sight of my camp the wood which we burn is drift wood which is broken to pieces in passing the falls, not one large tree longer than about 8 or 10 feet to be found drifted below the falls the plains are inferior in point of soil to those below, more stone on the sides of the hill, grass but a fiew inches high and but fiew flowers in the Plains, great quantites of Choke Cheries, Goose burres, red & yellow berries, & red & Purple currents on the edges of water courses in bottoms & damp places, about my camp the cliffs or bluffs are a hard red or redish brown earth containing Iron. we catch great quantities of Trout, and a kind of mustel, flat backs & a soft fish resembling a shad and a few Cat. at 5 oClock the party returned, fatigued as usial, and proceeded to mend their mockersons &c. and G Shannon & R. Fields to of the men who ware Sent up the medison river to hunt Elk, they killed no Elk, several Buffalow & Deer, and reports that the river is 120 yards wide and above 8 feet deep some timber on its borders. a powerfull rain fell on the party on their rout yestirday Wet some fiew articles, and caused the rout to be so bad, wet & Deep thay could with dificuelty proceed, Capt Lewis & the men with him much employed with the Iron Boat in fitting it for the Water, dispatched one man to George Drewyers camp below medison river for meat &c. a fair after noon. great numbers of buffalow water opposit to my camp every day. it may be here worthy of remark that the sales were hois[t]ed in the Canoes as the men were drawing them and the wind was great relief to them being sufficently strong to move the canoes on the Trucks, this is Saleing on Dry land in every sence of the word. Serjeant N Pryor sick, the party amused themselves with danceing untill 10 oClock all chearfullness and good humer, they all tied up their loads to make an early start in the morning.

[Lewis:] *Wednesday June 26th 1805.*

The Musquetoes are extreemly troublesome to us. This morning early I dispatched J. Fields and Drewyer in one of the canoes up the river to hunt Elk. set Frazier at work to sew the skins together for the covering of the boat. Sheilds and Gas[s] I sent over the river to surch a small timbered bottom on that side opposite to the Islands for timber and bark; and to myself I assign the duty of cook as well for those present as for the party which I expect again to arrive this evening from the lower camp. I collected my wood and water, boiled a large quantity of excellent dryed buffaloe meat and made each man a large suet dumpling by way of a treat. about 4 P.M. Shields and Gass returned with a better supply of timber than they had yet collected tho' not by any means enough. they brought some bark principally of the Cottonwood which I found was too brittle and soft for the purpose; for this article I find my only dependence is the sweet willow which has a tough & strong bark. Shields and Gass had killed seven buffaloe in their absence, the skins of which and a part of the best of the meat they brought with them. if I cannot procure a sufficient quantity of Elk's skins I shall substitute those of the buffaloe. late in the evening the party arrived with two more canoes and another portion of the baggage. Whitehouse one of them much heated and fortiegued on his arrivall d[r]ank a very hearty draught of water and was taken almost instantly extreemly ill. his pulse were full and I therefore bled him plentifully from which he felt great relief. I had no other instrument with which to perform this opperation but my penknife, however it answered very well. the wind being from S.E. today and favourable the men made considerable progress by means of their sails.

At the lower Camp. The party set out very early from this place, and took with them two canoes and a second alotment of baggage consisting of Parched meal, Pork, powder lead axes, tools, bisquit, portable soupe, some merchandize and cloathing. Capt. C. gave Sergt. Pryor a doze of salts this morning and employed Sharbono in rendering the buffaloe tallow which had been collected there, he obtained a sufficient quantity to fill three empty kegs. Capt. C. also scelected the articles to be deposited in the cash consisting of my desk which I had left for that purpose and in which I had left some books, my specimens of plants minerals & c. collected from fort Mandan to that place. also 2 Kegs of Pork, ½ a Keg of flour 2 blunderbushes, ½ a keg of fixed ammunition and some other small articles belonging to the party which could be dispenced with. deposited the swivel and carriage under the rocks a little above the camp near the river. great numbers of buffaloe still continue to water daily opposite the camp. The antelopes still continue scattered and seperate in the plains, the females with their young only of which they generally have two, and the males alone. Capt. Clarke measured the rout from the Camp at the Whitebear Islands to the lower camp which is as follows.

N. 42°	E. 4	Miles to an elivated point of the plain. the rout is a little to the left of this course first down the river and then turning gradually to the right up a long and gentle ascent to the high plain.
N. 66°	E. 3	M. passing the head of a drane which falls into the Missouri at the 19 feet or crooked fall.
N. 45°	E. 4.	M. to willow run, which always has a plen[ti]full supply of good water. and some timber.
N. 18°	E. 4.	M. passing the head of a drane which falls into the missouri below the great falls.
N. 10°	W. 2.	M. to the entrance of Portage creek. the rout for the canoes is to the right of this course and strikes the creek about 1¾ miles from it's entrance, by that means avoiding a very steep hill which lies above Portage creek.
N. 9°	W. ¾	M. to our camp opposite the last considerable rappid.
Miles	17.¾	

[Clark:] *June 26th Wednesday* 1805

Some rain last night this morning verry cloudy, the party set out this morning verry early with their loads to the canoe consisting of Parched meal Pork Powder Lead axes, Tools Bisquit, & soup & some Merchendize &c. Clothes &c. &c. I gave Serjt. Pryor a dost of salts, & set Chabonah to trying up the Buffalow tallow & put into the empty Kegs &c. I assort our articles for to be left at this place buried, [blank space in MS.] Kegs of Pork, ½ a Keg of flour, 2 blunderbuts. [blank space in MS.] Cattrages a few small lumbersom articles Capt Lewis Desk and some books & small articles in it

The wind from the N.W. verry worm flying clouds in the evening the wind shifted round to the East & blew hard, which is a fair wind for the two canoes to sail on the Plains across the portage, I had three Kegs of Buffalow Greese tried up. Great numbers of Buffalow opposite to our Camp watering to day.

[Lewis:] *Thursday June 27th 1805.*

The party returned early this morning for the remaining canoe and baggage; Whitehouse was not quite well this morning I therefore detained him and about 10 A.M. set him at work with Frazier sewing the skins together for the boat; Shields and gass continued the operation of shaving and fiting the horizontall bars of wood in the sections of the boat; the timber is so crooked and indifferent that they make but little progress, for myself I continued to act the part of cook in order to keep all hands employed. some Elk came near our camp and we killed 2 of them. at 1 P.M. a cloud arrose to the S.W. and shortly after came on attended with violent Thunder Lightning and hail[1] &c. (see notes on diary of the weather for June). soon after this storm was over Drewyer and J. Fields returned. they were about 4 miles above us during the storm, the hail was of no uncommon size where they were. They had killed 9 Elk and three bear during their absence; one of the bear was the largest by far that we have yet seen; the skin appear[ed] to me to be as large as a common ox. while hunting they saw a thick brushey bottom on the bank of the river where from the tracks along shore they suspected that there were bare concealed; they therefore landed without making any nois and climbed a leaning tree and placed themselves on it's branches about 20 feet above the ground, when thus securely fixed they gave a [w]hoop and this large bear instantly rushed forward to the place from whence he had heard the human voice issue, when he arrived at the tree he made a short paus and Drewyer shot him in the head. it is worthy of remark that these bear never climb. the fore feet of this bear measured nine inches across and the hind feet eleven and ¾ in length exclusive of the tallons and seven inches in width. a bear came within thirty yards of our camp last night and eat up about thirty weight of buffaloe suit which was hanging on a pole. my dog seems to be in a constant state of alarm with these bear and keeps barking all night.

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[1] Some of the lumps of ice that fell weighed three ounces, and measured seven inches in circumference. The ground was covered with them, as white as snow. — GASS (p. 148).

soon after the storm this evening the water on this side of the river became of a deep crimson colour which I p[r]esume proceeded from some stream above and on this side. there is a kind of soft red stone in the bluffs and bottoms of the gullies in this neighbourhood which forms this colouring matter. *At the lower camp.* Capt. Clark completed a draught of the river with the cou[r]ses and distances from the entrance of the Missouri to F. Mandan, which we intend depositing here in order to guard against accedents. Sergt. Pryor is somewhat better this morning. at 4 P.M. the party returned from the upper camp; Capt. C. gave them a drink of grog; they prepared for the labour of the next day. soon after the party returned it began to rain accompanyed by some hail and continued a short time; a second shower fell late in the evening accompanyed by a high wind from N.W. the mangled carcases of several buffaloe pass down the river today which had no doubt perished in the falls.

[Clark:] *June 27th Thursday* 1805.

a fair warm morning wind from the S.E. and moderate. Serjt. Pryor something better this morning, I proceed to finish a rough draugh[t] of the river & Distances to leave at this place, the wormest day we have had this year, at 4 oClock the Party returned from the head of the portage soon after it began to hail and rain hard and continued for a fiew minits & ceased for an hour and began to rain again with a heavey wind from the N W. I refresh the men with a drink of grog The river beginning to rise a little the water is coloured a redish brown, the small streams, discharges in great torrents, and partake of the choler of the earth over which it passes, a great part of which is light & of a redish brown. Several Buffalow pass drowned in passing over the falls cloudy all night, cold

[Lewis:] *Friday June 28th* 1805.

Set Drewyer to shaving the Elk skins, Fields to make the cross stays for the boat, Frazier and Whitehouse continue their operation with the skins, Shields and gass finish the horizontal bars of the sections; after which I sent them in surch of willow bark, a sufficient supply of which they now obtained to line the boat. expecting the party this evening I prepared a supper for them but they did not arrive. not having quite Elk skins enough I employed three buffaloe hides to cover one section. not being able to shave these skins I had them singed pretty closely with a blazeing torch; I think they will answer tolerable well. The White bear have become so troublesome to us that I do not think it prudent to send one man alone on an errand of any kind, particularly where he has to pass through the brush. we have seen two of them on the large Island opposite to us today but are so much engaged that we could not spare the time to hunt them but will make a frolick of it when the party return and drive them from these islands. they come close arround our camp every night but have never yet ventured to attack us and our dog gives us timely notice of their visits, he keeps constantly padroling all night. I have made the men sleep with their arms by them as usual for fear of accedents. the river is now about nine inches higher than it was on my arrival. *lower Camp.* early this morning Capt. C. dispatched the remaining canoe with some baggage to the top of the plain above Portage creek three miles in advance; some others he employed in carrying the articles to the cash and depositing them and others to mend the carriages which wer somewhat out of repair. this being accomplished he loaded the two carriages with the remaining baggage and set out with all the party and proceeded on with much difficulty to the canoe in the plain. portage creek had arisen considerably and the water was of a deep crimson colour and illy tasted. on his arrival at the canoe he found there was more baggage than he could possibly take at one load on the two sets of trucks and therefore left some barrels of pork & flour and a few heavy boxes of amunition which could not well be injured, and proceeded with the canoe & one set of trucks loaded with baggage to willow run where he encamped for the night, and killed two buffaloe to subsist the party. soon after his arrival at willow run he experienced a hard shower of rain which was succeeded by a violent wind from the S.W. off the snowy mountains accompanyed with rain; the party being cold and wet, he administered the consolation of a dram to each.

[Clark:] *June 28th Friday 1805*

a fair morning wind from the South I despatch the remaining canoe with baggage in hir to the top of the Hill three miles, imploy some hands in carrying those things we intend to deposit to the *carsh* [*cache*] or whole, some to repareing one of the trucks &c. &c. the water is riseing and of a redish brown colour. after covering the *carshe* & loading the two carriges with the remaining part of our Baggage we all set out pased the Creek which had rose a little and the water nearly red, and bad tasted, we assended the hill to the place the canoe lay with great labour, at the canoe at which place we left some boxes & Kegs of Pork & flour for another Load, and proceeded on with the canoe & what baggage we could draw on the wheels to willow run 6 miles where we camped. this run mearly some water remaining in holes &c. Soon after we halted we had a Shower, and at dark we experinced a most dredfull wind from off the Snow Mountains to the S.W. accompanied with rain which continued at intervales all night men wet. I refreshed them with a dram. Killed 2 Buffalow. Great no: about

[Lewis:] *Saturday June 29th 1805.*

This morning we experienced a heavy shower of rain for about an hour after which it became fair. not having seen the large fountain of which Capt. Clark spoke I determined to visit it today as I could better spare this day from my attention to the boat than probably any other when the work would be further advanced; accordingly after seting the hands at their several employments I took Drewyer and seet out for the fountain and passed through a level beautiful plain for about six miles when I reached the brake of the river hills here we were overtaken by a violent gust of wind and rain from the S.W. attended with thunder and Litning. I expected a hail storm probably from this cloud and therefore took refuge in a little gully where there were some broad stones with which I purposed protecting my head if we should have a repetition of the seene of the 27th but fortunately we had but little hail and that not large; I sat very composedly for about an hour without she[l]ter and took a copious drenching of rain; after the shower was over I continued my rout to the fountain[1] which I found much as Capt C: had discribed & think it may well be retained on the list of prodegies of this neighbourhood towards which, nature seems to have dealt with a liberal hand, for I have scarcely experienced a day since my first arrival in this quarter without experiencing some novel occurrence among the party or witnessing the appearance of some uncommon object. I think this fountain the largest I ever beheld, and the ha[n]dsome cascade which it affords over some steep and irregular rocks in it's passage to the river adds not a little to it's beauty. it is about 25 yds from the river, situated in a pretty little level plain, and has a suddon decent of about 6 feet in one part of it's course. the water of this fountain is extreemly tran[s]parent and cold; nor is it impregnated with lime or any other extranious matter which I can discover, but is very pure and pleasent. it's waters marke their passage as Capt Clark observes for a considerable distance down the Missouri notwithstanding it's rapidity and force. the water of the fountain boil up with such force near it's center that it's surface in that part seems even higher than the surrounding earth which is a firm handsom terf of fine green grass. after amusing myself about 20 minutes in examining the fountain I found myself so chilled with my wet cloaths that I determined to return and accordingly set out; on our way to camp we found a buffaloe dead which we had shot as we came out and took a parsel of the meat to camp it was in very good order; the hump and tongue of a fat buffaloe I esteem great delicacies. on my arrival at camp I was astonished not to find the party yet arrived, but then concluded that probably the state of the praries had detained them, as in the wet state in which they are at present the mud sticks to the wheels is such manner that they are obliged to halt frequently and clense them.

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[1] This fountain, fan-shaped and between 300 and 400 feet wide, is known as the Giant Spring; outside of Yellowstone Park I have never seen a spring to compare with it. The park springs are of hot water, but the water of the Giant Spring is as cold, pure, and clear as one can conceive. The volume of water thrown out is enormous, being 680 cubic feet per second, with but little variation. — O. D. WHEELER.

Transaction and occurrencies which took place with Capt. Clark and party today. Shortly after the rain which fell early this morning he found it impossible from the state of the plains for the party to reach the upper extremity of the portage with their present load, and therefore sent back almost all of the party to bring the baggage which had been left behind yesterday. he determined himself to pass by the way of the river to camp in order to supply the deficiency of some notes and remarks which he had made as he first ascended the river but which he had unfortunately lost. accordingly he left one man at Willow run to guard the baggage and took with him his black man York, Sharbono and his indian woman also accompanyed Capt. C. on his arrival at the falls he perceived a very black cloud rising in the West which threatened immediate rain; he looked about for a shelter but could fine none without being in great danger of being blown into the river should the wind prove as violent as it sometimes is on those occasions in these plains; at length about a ¼ of a mile above the falls he discovered a deep rivene where there were some shelving rocks under which he took shelter near the river with Sharbono and the Indian woman; laying their guns compass &c. under a shelving rock on the upper side of the rivene where they were perfectly secure from the rain. the first shower was moderate accompanyed by a violent rain the effects of which they did but little feel; soon after a most violent torrent of rain decended accompanyed with hail; the rain appeared to decend in a body and instantly collected in the rivene and came down in a roling torrent with irrisistable force driving rocks mud and everything before it which opposed it's passage, Capt. C. fortunately discovered it a moment before it reached them and seizing his gun and shot pouch with his left hand with the right he assisted himself up the steep bluff shoving occasionally the Indian woman before him who had her child in her arms; Sharbono had the woman by the hand indeavouring to pull her up the hill but was so much frightened that he remained frequently motionless and but for Capt. C. both himself and his [wo]man and child must have perished. so suddon was the rise of the water that before Capt. C. could reach his gun and begin to ascend the bank it was up to his waist and wet his watch, and he could scarcely ascend faster than it arrose till it had obtained the debth of 15 feet with a current tremendious to behold. one moment longer & it would have swept them into the river just above the great cataract of 87 feet where they must have inevitably perished. S[h]arbono lost his gun, shot pouch, horn, tomahawk, and my wiping rod, Capt. Clark his Umbrella and compass or circumferenter. they fortunately arrived on the plain safe, where they found the black man, York, in surch of them; york had seperated from them a little while before the storm, in pursuit of some buffaloe and had not seen them enter the rivene; when this gust came on he returned in surch of them & not being able to find them for some time was much allarmed. the bier[1] in which the woman carrys her child and all it's cloaths wer swept away as they lay at her feet she having time only to grasp her child; the infant was therefore very cold and the woman also who had just recovered from a severe indisposition was also wet and cold, Capt C. therefore relinquished his intended rout and returned to the camp at willow run in order also to obtain dry cloathes for himself and directed them to follow him. On Capt. Clark's arrival at camp he found that the party dispatched for the baggage had returned in great confusion and consternation leaving their loads in the plains; the men who were all nearly naked and [no] covering on the head were sorely mawled with the hail which was so large and driven with such force by the wind that it nocked many of them down and one particular[l]y as many as three times most of them were bleeding freely and complained of being much bruised. willow run raised about 6 feet with this rain and the plains were so wet they could do nothing more this evening. Capt. C. gave the party a dram to console them in some measure for their general defeat.

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[1] Coues says, "This is an interesting use of the old word *bier*, which we found early in this work employed for a covering for the head to keep off mosquitoes (whence our mosquito-*bar*); but it is now archaic, except in connection with funerals. The 'net' of the text therefore is simply the child's cradle, made light and portable, something like a basket." The Biddle text says, "The net in which it lay at her feet was carried down the current." The English word "bier" originally meant, according to Murray, "a framework for carrying, a litter or stretcher"; and early forms were "bære, bere, bare, bear," etc. Accordingly it is possible that Coues is correct in the opinion just cited; but a more rational etymology of "bier," as here used, makes it a phonetic rendering of another word (perhaps derived from the French *barre*, meaning "bar," or other obstruction). The word to which we refer is *baire*, used by the Jesuit missionary Poisson in 1727; he describes the torments endured by the voyagers on the lower Mississippi from mosquitoes, from which their only defence was the *baire* — "that is to say, a large canvas, the ends of which we carefully fold beneath the mattress; in these tombs, stifling with heat, we are compelled to sleep" (*Jes. Relations*, lxvii, pp. 289, 295, 311). The term *baire*, thus used, would readily spread, among the French voyageurs and traders, throughout the entire Northwestern region; and by the time of Lewis and Clark the canvas was, at least sometimes, replaced by gauze or net (as affording fresh air), which would naturally retain the name *baire*, very easily corruptible to "bier." The Indian

[Clark:] *June 29th Satturday 1805*

a little rain verry early this morning after[wards] clear, finding that the Prarie was so wet as to render it impossible to pass on to the end of the portage, deturmined to send back to the top of the hill at the creek for the remaining part of the baggage left at that place yesterday, leaveing one man to take care of the baggage at this place. I deturmined my self to proceed on to the falls and take the river, according we all set out, I took my servent & one man, Chabono our Interpreter & his Squar accompanied, soon after I arrived at the falls, I perceived a cloud which appeared black and threaten imediate rain, I looked out for a shelter but could see no place without being in great danger of being blown into the river if the wind should prove as turbelant as it is at some times about ¼ of a

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woman — a captive torn from her own people, and a poor slave when purchased by Charbonneau — probably used for her child's cradle a piece of American cord netting. The word "bar" in the compound "mosquito-bar" is probably only a corruption of "baire." These views are borne out by Lewis's frequent statements in subsequent portions of his journal, too numerous to cite here. — ED.

mile above the falls I obs^d a Deep riveen in which was shelveing rocks under which we took shelter near the river and placed our guns the compass &^{c} &^{c} under a shelving rock on the upper side of the creek, in a place which was verry secure from rain, the first shower was moderate accompanied with a violent wind, the effects of which we did not feel, soon after a torrent of rain and hail fell more violent than ever I saw before, the rain fell like one voley of water falling from the heavens and gave us time only to get out of the way of a torrent of water which was Poreing down the hill in[to] the River with emence force tareing every thing before it takeing with it large rocks & mud, I took my gun & shot pouch in my left hand, and with the right scrambled up the hill pushing the Interpreters wife (who had her child in her arms) before me, the Interpreter himself makeing attempts to pull up his wife by the hand much scared and nearly without motion, we at length reached the top of the hill safe where I found my servent in serch of us greatly agitated, for our wellfar. before I got out of the bottom of the reveen which was a flat dry rock when I entered it, the water was up to my waste & wet my watch, I scercely got out before it raised 10 feet deep with a torrent which [was] turrouble to behold, and by the time I reached the top of the hill, at least 15 feet water, I derected the party to return to the camp at the run as fast as possible to get to our Lode where Clothes could be got to cover the child whose clothes were all lost, and the woman who was but just recovering from a severe indisposition, and was wet and cold, I was fearfull of a relaps I caused her as also the others of the party to take a little spirits, which my servent had in a canteen, which revived [them] verry much. on arrival at the camp on the willow run met the party who had returned in great confusion to the run leaveing their loads in the Plain, the hail & wind being so large and violent in the plains, and them naked, they were much brused, and some nearly killed one knocked down three times, and others without hats or any thing on their heads bloody & complained verry much, I refreshed them with a little grog. Soon after the run began to rise and rose 6 feet in a fiew minets. I lost at the river in the torrent the large *compas*, an elegant fusee, Tomahawk *Humbrallo,* [Umbrella] shot pouch & horn with powder & Ball, Mockersons, & the woman lost her childs Bear & Clothes bedding &c. The Compass, is a serious loss, as we have no other large one. The plains are so wet that we can do nothing this evining particularly as two deep reveens are between ourselves & Load

[Lewis:] *Sunday June 30th 1805.*

We had a heavy dew this morning which is a remarkable event. Fraizer and Whitehouse still continued their opperation of sewing the skins together. I set Shields and gass to shaving bark and Fields continued to make the cross brases. Drewyer and myself rendered a considerable quantity of tallow and cooked. I begin to be extremely impatient to be off as the season is now waisting a pace nearly three months have now elapsed since we left Fort Mandan and not yet reached the Rocky Mountains I am therefore fully preswaded that we shall not reach Fort Mandan again this season if we even return from the ocean to the Snake Indians. wherever we find timber there is also beaver; Drewyer killed two today. There are a number of large bat or goatsucker here I killed one of them and found that there was no difference between them and those common to the U' States; I have not seen the leather winged bat for some time nor is there any of the small goatsuckers in this quarter of the country. we have not the whip-poor-will either. this last is by many persons in the U' States confounded with the large goat-sucker or night-hawk as it is called in the Eastern States, and are taken for the same bird. it is true that there is a great resemblance but they are distinct species of the goatsucker. here the one exists without the other. the large goat sucker lays it's eggs in these open plains without the preperation of a nest. we have found their eggs in several instances they lay only two before they set nor do I beleive that they raise more than one brood in a season; they have now just hatched their young. This evening the bark was shaved and the leather covering for the sections were also completed and I had them put into the water, in order to toughen the bark, and prepare the leather for sewing on the sections in the morning. it has taken 28 Elk skins and 4 Buffaloe skins to complete her. the cross bars are also finished this evening; we have therefore only the way strips now to obtain in order to complete the wood work, and this I fear will be a difficult task. The party have not returned from the lower camp I am therefore fearfull that some uncommon accedent has happened.

Occurrences with Capt. Clark and Party.

This morning Capt. Clark dispatched two men to kill some small buffaloe, two others to the falls to surch for the articles lost yesterday, one he retained to cook and sent the others for the baggage left in the plains yesterday. the hunters soon returned loaded with meat those sent for the baggage brought it up in a few hours, he then set four men at work to make axeltrees and repare the carrages; the others he employed in conveying the baggage over the run on their sholders it having now fallen to about 3 feet water. the men complained much today of the bruises and wounds which they had received yesterday from the hail. the two men sent to the falls returned with the compas which they found covered in the mud and sand near the mouth of the revene the other articles were irrecoverably lost. they found that part of [the] rivene in which Capt. C. had been seting yesterday filled with huge rocks. at 11 A. M. Capt. Clark dispatched the party with a load of baggage as far as the 6 mile stake, with orders to deposit it there and return with the carriages which they did accordingly. they experienced a heavy gust of wind this evening from the S.W. after which it was a fair afternoon. more buffaloe than usual were seen about their camp; Capt. C. assured me that he beleives he saw at least ten thousand at one view.

Point of Observation No. 29. June 30th 1805.

At our camp on the Lard. side of the Missouri opposite to the White bear Islands observed Equal Altitudes of the Sun with Sextant.

Equal Altitudes of ⊙'s L. L.

	h	m	s			h	m	s
A.M.	8.	50	19.	—	P.M.	5.	51.	54.

I have made several attempts to obtain Equal altitudes since my arrival here but have been uniformly defeated untill now by the flying clouds and storms in the evening.

[Clark:] *June 30th Sunday 1805*

a fair morning, I despatch the party except 5 for the remaining baggage scattered in the plains, two to hunt for meat, two to the falls, and one to cook at 10 oClock the hunters came in loaded with fat meat, & those [who] were despatched for the baggage returned with it. I set 4 men to make new axeltrees & repare the carrages, others to take the load across the river which had fallen & is about 3 feet water, Men complain of being Soore this day dull and lolling about, The two men dispatched in serch of the articles lost yesterday returned and brought the compass which they found in the mud & stones near the mouth of the reveen, no other articles found, the place I sheltered under filled up with hugh Rocks. I set the party out at 11 oClock to take a load to the 6 mile stake & return this evening, and I intend to take on the ballance to the river tomorrow if the prarie will permit. at 3 oClock a storm of wind from the S.W. after which we had a clear evening. Great numbers of Buffalow in every derection. I think 10,000 may be seen in a view.

[Lewis:] *Monday July 1st 1805.*

This morning I set Frazier and Whitehouse to sewing the leather on the sides of the sections of the boat; Shields and J. Fields to collect and split light wood and prepare a pit to make tar. Gas[s] I set at work to make the way strips out of some willow limbs which tho' indifferent were the best which could be obtained. Drewyer and myself completed the opperation of rendering the tallow; we obtained about 100 lbs. by evening the skins were all attatched to their sections and I returned them again to the water. all matters were now in readiness to commence the opperation of puting the parts of the boat together in the morning. the way strips are not yet ready but will be done in time as I have obtained the necessary timber. the difficulty in obtaining the necessary materials has retarded my operations in forming this boat extreemly tedious and troublesome; and as it was a novel peice of machinism to all who were employed my constant attention was necessary to every part of the work; this together with the duties of cheif cook has kept me pretty well employed. at 3 P.M. Capt. Clark arrived with the party all very much fortiegued. he brought with him all the baggage except what he had deposited yesterday at the six mile stake, for which the party were too much fortiegued to return this evening. we gave them a dram and suffered them to rest from their labours this evening. I directed Bratton to assist in making the tar tomorrow, and scelected several others to assist in puting the boat together. the day has been warm and the Musquetoes troublesome of course the bear were about our camp all last night, we have therefore determined to beat up their quarters tomorrow, and kill them or drive them from their haunts about this place.[1]

[Clark, first draft:]

White Bear Islands above the Falls of the Missouri July 1st Monday 1805 —

I arrived at this place to day at 3 oClock P.M. with the party from the lower part of the portage[2] much fatigued &c.

[Clark:]

July 1st Monday 1805.

We set out early this morning with the remaining load, and proceeded on verry well to Capt Lewis's camp where we arrived at 3 oClock, the Day worm and party much fatigued,

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[1] At this point begins Clark's parallel record of the voyage: it is found in Codex G, which begins on July 1 and ends on October 10, 1805. The second drafts for July 1, 2, 3 are from Clark-Voorhis note-book, No. 1. — Ed.

[2] The three points connected with the portage — one below near Portage Creek; one above, opposite White Bear Islands; and another between, at Willow Run — are laid down on Clark's sketch. — Ed.

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found Capt. Lewis and party all buisey employed in fitting up the Iron boat, the wind hard from the S.W. one man verry unwell, his legs & thies broke out and Swelled, the hail which fell at Capt. Lewis camp 27 Int. was 7 Inches in circumference & waied 3 ounces, fortunately for us it was not so large in the plains, if it had [been] we should most certainly fallen victims to its rage as the men were mostly naked, and but few with hats or any covering on their heads, The hunters killed 3 white bear one large, the fore feet of which measured 9 Inches across, the hind feet 11 Inches ¾ long & 7 Inches wide a bear [came] naarly catching Joseph Fields chased him into the water, bear about the camp every night & seen on an Isld in the day

[Lewis:] *Tuesday July 2nd. 1805.*

A shower of rain fell very early this morning after which we dispatched the men for the remaining baggage at the 6 mile stake. Shields and Bratton seting their tar-kiln, Sergt. Pryor and Gass at work on the waystrips and myself and all other hands engaged in puting the boat together which we accomplished in about 3 hours and I then set four men at work sewing the leather over the cross bars of Iron on the inner side of the boat, which form the ends of the sections. about 2 P.M. the party returned with the baggage, all well pleased that they had completed the laborious task of portage. The Musquetoes uncommonly troublesome. the wind hard from the S.W. I think it possible that these almost perpetual S. W. winds, proceede from the agency of the Snowey Mountains and the wide level and untimbered plains which streach themselves along their bases for an immence distance (i. e.) that the air comeing in contact with the snow is suddonly chilled and condenced, thus becoming heav[i]er than the air beneath in the plains, it glides down the sides of these mountains & decends to the plains, where by the constant action of the sun on the face of an untimbered country there is a partial vacuum formed for it's reception. I have observed that the winds from this quarter are always the coldest and most violent which we experience, yet I am far from giving full credit to my own hypothesis on this subject; if ho[w]ever I find on the opposite side of these mountains that the winds take a contrary direction I shall then have more faith. After I had completed my observation of Equal altitudes today Capt. Clark Myself and 12 men passed over to the large Island to hunt bear. the brush in that part of it where the bear frequent is an almost impenitrable thicket of the broad leafed willow; this brush we entered in small parties of 3 or four together and surched in every part. we found one only which made at Drewyer and he shot him in the brest at the distance of about 20 feet, the ball fortunately passed through his heart, the stroke knocked the bear down and gave Drewyer time to get out of his sight; the bear changed his course we pursued him about 100 yards by the blood and found him dead; we surched the thicket in every part but found no other, and therefore returned. this was a young male and would weigh about 400 lbs. the water of the Missouri here is in most places about 10 feet deep. after our return, in moving some of the baggage we caught a large rat. (*Copy for Dr. Barton*) it was somewhat larger than the common European rat, of lighter colour; the body and outer part of the legs and head of a light lead colour, the belly and inner side of the legs white as were also the feet and years. the toes were longer and the ears much larger than the common rat; the ears uncovered with hair. the eyes were black and prominent the whiskers very long and full. the tail was reather longer than the body and covered with fine fur or poil of the same length and colour of the back. the fur was very silkey close and short. I have frequently seen the nests of these rats in clifts of rocks and hollow trees but never before saw one of them.[1] they feed very much on the fruit and seed of the prickly pear; or at least I have seen large quantities of the hulls of that fruit lying about their holes and in their nests.

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[1] This Rocky Mountain rat, *Neotama cinera*, was first described by Lewis. Its technical name was not assigned until 1815. — Ed.

July 2nd 1805. Observed Equal altitudes of ☉ with Sextant

	h	m	s		h	m	s	
A.M.	8.	7.	22	P.M.	lost by clouds			Altd. at time of observation 52° 5'. 30"
	".	8.	55		6.	18.	4.	
	"	10.	33.		"	19.	4.	

Chronometer too [blank space in MS.] on Mean Time [blank space in MS.]

[**Clark, first draft:**] *July 2nd Tuesday* 1805

Some rain at day light this morning. dispatched the party for the remaining baggage left at the 6 mile Stake, they returned in the evening and we crossed to a large Island nearly opposit to us to kill *bear* which has been Seen frequently in the Island, we killed one bear & returned at Sun set.

The Roreing of the falls for maney miles above us

[**Clark:**] *July 2nd Tuesday* 1805

Some rain at day light this morning after which a fair morning, dispatched the men for the Kegs &c. left at the Six mile Stake, others to get timber for the boat &c. Musquetors verry troublesom to day, day worm, after the return of the men with the articles left at the 6 mile stake Capt Lewis myself & 12 men crossed to an Island on which we saw a bear the evening before, & several had been seen by the party at this place, we killed one of the bear and returned. The river at this place is [blank space in MS.] yards wide and about 10 feet water cought a rat in our stores, which had done some mischief, this rat was about the size of a common large rat, larger ears, long whiskers & toes, with a tail long & hairey like a ground Squirel, verry fine fur and lighter than the common rat. Wind to day as usial from the S W. and hard all the after part of the day. those winds are also ice cool and generally verry hard.

[Lewis:] *Wednesday July 3rd 1805.*

This morning early we employed all hands; some were making tar or attempting to make it, others wer attatching the skins on the boat, other[s] cuting and fiting the bark for lining puting in the woodworke &c some hunters were sent out to kill buffaloe in order to make pemecon to take with us and also for their skins which we now wa[n]t to cover our baggage in the boat and canoes when we depart from hence. the Indians have informed us that we should shortly leave the buffaloe country after passing the falls; this I much regret for I know when we leave the buffaloe that we shal[l] sometimes be under the necessity of fasting occasionally. and at all events the white puddings will be irretrievably lost and Sharbono out of imployment. our tar-kiln which ought to have began to run this morning has yealded no tar as yet and I am much affraid will not yeald any, if so I fear the whole opperation of my boat will be useless. I fear I have committed another blunder also in sewing the skins with a nedle which has sharp edges these have cut the skin and as it drys I discover that the throng dose not fill the holes as I expected tho' I made them sew with a large throng for that purpose. at 10 OCk A.M. we had a slight shower which scarcely wet the grass. One buffaloe only and 2 antelopes killed today six beaver and 2 otter have been killed within the last three days. The current of the river looks so gentle and inviting that the men all seem anxious to be moving upwards as well as ourselves. we have got the boat prety well forward today and think we shall be able to complete her tomorrow except paying her, to do which will require some little time to make her first perfectly dry. she has assumed her shape and looks extreemly well. She will be very light, more so than any vessel of her size that I ever saw.

[Clark, first draft:] *July 3rd Wednesday 1805*

all of party employed in Sowing the Skins to the boat, burning Tare, preparing timber, hunting buffalow for their meat &

Skins, drying & repacking the Stores, Goods &c. &c. at 1 oClock began to rain. in the evening the hunters killed two antilopes & a Buffalow.

[Clark:] *July 3rd Wednesday 1805*

A fine morning wind from the S W all the party employed some about the boat, attaching the skins & sowing them to the sections, others prepareing timber, some burning tar of the drift pine, some airring and repacking the stores & Goods, & others hunting for Meet to make pemitigon & for the use of their skins to cover the canoes & boat. a small shower at 1 oClock which did scercely wet the grass. one buffalow and two antilopes killed this evening. Six beaver & 2 orters has been killed at this camp within a fiew days. We discover no fish above the falls as yet. the only timber in this part of the countrey is willow, a fiew cotton trees which is neither large nor tall, Box alder and red wood (*Bois roche* arrow wood) The water tolerably clear and soft in the river, current jentle and bottoms riseing from the water; no appearance of the river riseing more than a few feet above the falls, as high up as we have yet explored but few trees on the Std Side the grass is high and fine near the river. the winds has blown for several days from the S.W. I think it possible that those almost perpetial S W. winds, proceed from the agency of the Snowey Mountains and the wide leavel and untimbered plains which streach themselves along their borders for an emence distance, that the air comeing in contact with the snow is suddenly chilled and condensed, thus becomeing heavyer than the air beneath in the plains it glides down the sides of those mountains and decends to the plains, where by the constant action of the sun on the face of the untimbered country there is a partial vacuom formed for it's reception I have observed that the winds from this quarter is always the coaldest and most violent which we experience, yet I am far from giveing full credit to this hypotheses on this subject; if I find however on the opposit side of these mountains that the winds take a contrary direction I shall then have full faith. (The winds take a contrary derection in the morning or from the mountains on the west side)[1]

[Lewis:] *Thursday July 4th 1805.*

Yesterday we permitted Sergt Gass McNeal and several others who had not yet seen the falls to visit them. no appearance of tar yet and I am now confident that we shall not be able to obtain any; a serious misfortune. I employed a number of hands on the boat today and by 4 P.M. in the evening completed her except the most difficult part of the work that of making her seams secure. I had her turned up and some small fires kindled underneath to dry her. Capt C. completed a draught of the river from Fort Mandan to this place which we intend depositing at this place in order to guard against accedents. not having seen the Snake Indians or knowing in fact whether to calculate on their friendship or hostility or friendship we have conceived our party sufficiently small and therefore have concluded not to dispatch a canoe with a part of our men to St Louis as we had intended early in the spring. we fear also that such a measure might possibly discourage those who would in such case remain, and might possibly hazzard the fate of the expedition. we have never once hinted to any one of the party that we had such a scheme in contemplation, and all appear perfectly to have made up their minds to suceed in the expedition or purish in the attempt. we all beleive that we are now about to enter on the most perilous and difficult part of our voyage, yet I see no one repining; all appear ready to me[e]t those difficulties which await us with resolution and becoming fortitude. we had a heavy dew this morning. the clouds near these mountains rise suddonly and discharge their contents[2] partially on the neighbouring plains; the same cloud will discharge hail alone in one part hail and rain in another and rain only in a third within the space of a few miles; and on the Mountains to the S.E. of us sometimes snow. at present there is no snow on those mountains; that which covered them when we first saw them and which has fallen on them several times since has all disappeared. the Mountains to the N.W. & W. of us are still entirely covered are white and glitter with the reflection of the sun. I do not beleive that the clouds which prevail at this season of the year reach the summits of those lofty mountains; and if they do the probability is that they deposit snow only for there has been no perceptible deminution of the snow which they contain since we first saw them. I have thought it probable that these mountains might have derived their appellation of *shining Mountains*, from their glittering appearance when the sun shines in certain directions on the snow which covers them. since our arrival at the falls we have repeatedly witnessed a nois which proceeds from a direction a little to the N. of West as loud and resembling precisely the discharge of a piece of ordinance of 6 pounds at the distance of three miles. I was informed of it by the men several times before I paid any attention to it, thinking it was thunder most probably which they had mistaken at length walking in the plains the other day I heard this noise very disti[n]ctly, it was perfectly calm clear and not a cloud to be seen, I halted and listened attentively about an hour during which time I heard two other discharges and t[o]ok the direction of the sound with my pocket compass. I have no doubt but if I had leasure I could find from whence it issued. I have thou[gh]t it probable that it might be caused by runing water in some of the caverns of those immence mountains, on the principal of the blowing caverns; but in such case the sounds would be periodical & regular, which is not the case with this, being sometimes heard once only and at other times, six or seven discharges in quick succession. it is heard also at different seasons of the day and night. I am at a loss to account for this phenomenon. our work being at an end this evening, we gave the men a drink of Sperits, it being the last of our stock, and some of them appeared a little sensible of it's effects the fiddle was plyed and they danced very merrily untill 9 in the evening when a

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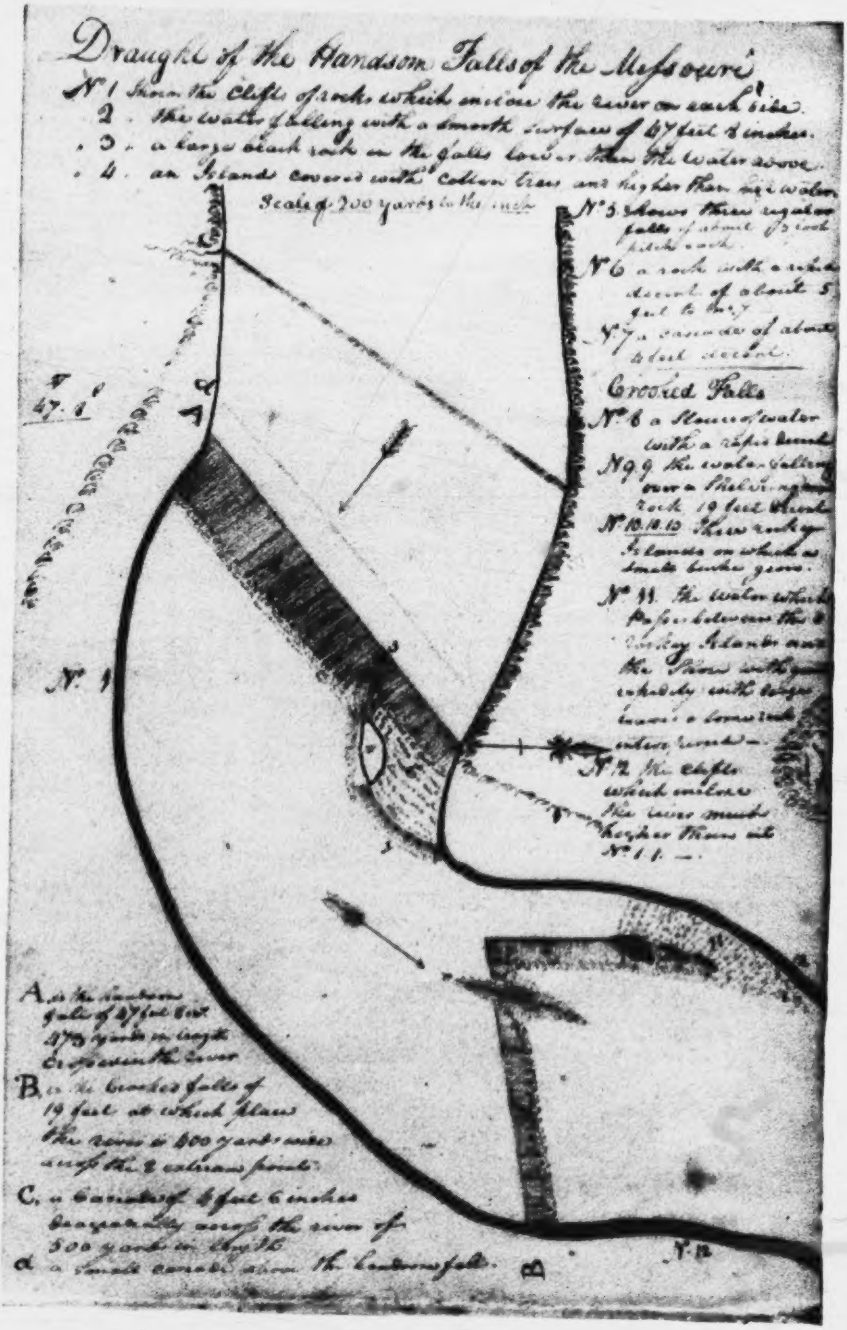
[1] Clark here inserts (on fly-leaf of Clark-Voorhis note-book No. 1.) survey notes of the portage, which are transferred to "Scientific Data" in vol. v. — Ed.

[2] At this point in Codex E (pp. 132, 133) occurs the fine map of the Falls in Missouri River; it is presented herewith. — Ed.


Draught of the Handsom Falls of the Missouri
No 1 Shows the Clifts of rocks which incloses the river on each side.
2 . the water falling with a smooth surface of 47 feet 8 inches.
3 . a large black rock in the falls lower than the water above.
4 . an Island covered with cotton trees and higher than the water
Scale of 200 yards to the inch
No 5. shows three regular falls of about 3 feet pitch each.
No 6 a rock with a whole descent of about 5 feet to No 7
No 7 a cascade of about 6 feet descent.
Crooked Falls
No 8 a Sheet of water with a rapid descent
No 9. the water falling over a shelving rock 19 feet perpend
No 10.10.10 Three rocky Islands on which a small timber grows.
No 11. the water which passes between the 3 rocky Islands and the Shore with great rapidity with large waves & some rock interspersed —
No 12 the Clifts which inclose the river much higher than at No 11. —
47. 8
A
No 1
B
No 12
A is the handsom fall of 47 feet 8 in 473 yards in length across the river
B is the Crooked falls of 19 feet at which place the river is 800 yards wide across the 2 extreme points.
C, a Cascade of 6 feet 6 inches diagonally across the river of 500 yards in length
d a small cascade above the handsom fall.

The Handsom Falls of the Missouri River,
sketch-map by Clark.

heavy shower of rain put an end to that part of the amusement tho' they continued their mirth with songs and festive jokes and were extreemly merry untill late at night. we had a very comfortable dinner, of bacon, beans, suit dumplings & buffaloe beaf &c. in short we had no just cause to covet the sumptuous feasts of our countrymen on this day. one Elk and a beaver were all that was killed by the hunters today; the buffaloe seem to have withdrawn themselves from this neighbourhood; the men inform us that they are still abundant about the falls.

[Clark:] *July the 4th Thursday 1805*

A fine morning, a heavy dew last night; all hands employed in Completeing the leather boat, gave the Party a dram which made Several verry lively, a black Cloud came up from the S.W, and rained a fiew drops I employ my Self drawing a Copy of the river to be left at this place for fear of Some accident in advance, I have left buried below the falls a Map of the Countrey below Fort Mandan with Sundery private papers. The party amused themselves danceing untill late when a shower of rain broke up the amusement, all lively and Chearfull, one Elk and a beaver kill'd to day. Our Tar kill like to turn out nothing from the following cause. [Blank space in MS.]

The Climate about the falls of Missouri appears to be Singular Cloudy every day (since our arrival near them) which rise from defferent directions and discharge themselves partially in the plains & mountains, in Some places rain others rain & hail, hail alone, and on the mountains in Some parts Snow. a rumbling like Cannon at a great distance is heard to the west of us; the Cause we can't account [for].[1]

[Lewis:] *Friday July 5th 1805.*

This morning I had the boat removed to an open situation, scaffold[ed] her off the ground, turned her keel to the sun and kindled fires under her to dry her more expediciously. I then set a couple of men to pounding of charcoal to form a composition with some beeswax which we have and buffaloe tallow now my only hope and resource for paying my boat; I sincerely hope it may answer yet I fear it will not. the boat in every other rispect completely answers my most sanguine expectation; she is not yet dry and eight men can carry her with the greatest ease; she is strong and will carry at least 8,000 lbs. with her suit of hands; her form is as complete as I could wish it. the stitches begin to gape very much since she has began to dry; I am now convinced this would not have been the case had the skins been sewed with a sharp point only and the leather not cut by the edges of a sharp nedle. about 8 A.M. a large herd of buffaloe came near our camp and Capt. Clark with a party of the hunters indeavoured to get a shoot at them but the wind proved unfavourable and they ran off; the hunters pursued and killed three of them; we had most of the meat brought in and set a party to drying it. their skins were also brought in and streached to dry for the purpose of covering the baggage. 2 Wolves and three Antelopes also killed today. we permitted three other men to visit the falls today; these were the last of the party who had not as yet indulged themselves with this grand and interesting seen. the buffaloe again appear in great numbers about our camp and seem to be moving down the river. it is somewhat remarkable that altho' you may see ten or a douzen herds of buffaloe distinctly scattered and many miles distant yet if they are undisturbed by pursuit, they will all be traveling in one direction. the men who were permitted to visit the falls today returned in the evening and reported that the buffaloe were very numerous in that quarter; and as the country is more broken near the river in that quarter we conclude to dispatch a couple of canoes tomorrow with some hunters to kill as many as will answer our purposes.

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[1] In the weather diary of this date (Codex I, p. 23), Clark wrote: "everything across the portage." — Ed.

The plains in this part of the country are not so fertile as below the entrance of the Cockkle or missel shell river and from thence down the Missouri (*Qu.*) there is also much more stone on the sides of the hills and on the broken lands than below.

[Clark:] *July 5th Friday 1805*

A fine morning and but little wind, worm and Sultrey at 8 oClock. I saw a large gangue of Buffalow and prosued them with Several men the wind was unfavourable and we could not get near them, the party scattered & Killed 3 buffalow and brought into [camp] their Skins and Some meat, killed 2 wolves & 3 antilopes for their Skins, Capt. Lewis much engaged in completeing the Leather boat. Three men went to See the Falls, Saw great numbers of Buffalow on both Sides of the river. great numbers of young blackbirds

[Lewis:] *Saturday July 6th 1805.*

In the cou[r]se of last night had several showers of hail and rain attended with thunder and lightning. about day a heavy storm came on from the S.W. attended with hail rain and a continued roar of thunder and some lightning. the hail was as large as musket balls and covered the ground perfectly. we hand [had] some of it collected which kept very well through the day and served to cool our water. These showers and gusts keep my boat wet in dispite of my exertions. she is not yet ready for the grease and coal. after the hail and rain was over this morning we dispatched 4 hunters and two canoes to the head of the rappids as we had determined last evening. the red and yellow courants are now ripe and abundant, they are reather asced [acid] as yet. There is a remarkable small fox which ascociate in large communities and burrow in the praries something like the small wolf but we have not as yet been able to obtain one of them;[1] they are extreemly watchfull and take reffuge in their burrows which are very deep; we have seen them no where except near these falls.

[Clark:] *July 6th Satturday 1805*

a heavy wind from the SW and some rain about midnight last [night], at day light this morning a verry black Cloud from the S. W, with a Contin[u]ed rore of thunder & some lightining and rained and hailed tremendiously for about ½ an hour, the hail was the Size of a Musket ball and covered the ground. this hail & rain was accompan^{d} by a hard wind which lasted for a fiew minits, Cloudy all the forepart of the day, after Part clear. dispatched 4 men in 2 Canoes to the falls, to kill Buffalow, for their Skins & Meat others employd about the boat, I cought Some Small fish this evening

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[1] This is the kit-fox (*Vulpes velox*), which Lewis later compares with the Columbia species. — ED.

[Lewis:] *Sunday July 7th 1805.*

The weather warm and cloudy therefore unfavourable for my operations; I keep small fires under the boat; the blowing flies are innumerable about it; the moisture retained by the bark prevents it from drying as fast as it otherwise would. we dispatched two other hunters to kill Elk or buffaloe for their skins to cover our baggage. we have no tents; the men are therefore obliged to have recourse to the sails for shelter from the weather and we have not more skins than are sufficient to cover our baggage when stoed away in bulk on land. many of the men are engaged in dressing leather to cloath themselves. their leather cloathes soon become rotton as they are much exposed to the water and frequently wet. Cap^{t} Clarks black man York is very unwell today and he gave him a doze of tartar emettic which operated very well and he was much better in the evening. this is a discription of medecine that I never have recourse to in my practice except in cases of the intermittent fever. this evening the hunters returned with the canoes and brought thre[e] buffaloe skins only and two Antelope 4 deer and three wolf skins; they reported that the buffaloe had gone further down the river. the two hunters whom we sent out from hence returned also without having killed anything except one Elk. I set one of the party at work to make me some sacks of the wolf skins, to transport my Instruments when occasion requirs their being carried any distance by land. we had a light shower of rain about 4 P.M. attended with some thunder and lightning. one beaver caught this morning. the musquetoes are excessively troublesome to us. I have prepared my composition which I should have put on this evening but the rain prevented me.

[Clark:] *July 7th Sunday 1805*

A Warm day wind from the S.W Cloudy as usial, the four men hunters did not return last night. dispatched 2 men to kill Elk for the use of their Skin for the boat. my man York sick; I give him a dost of Tarter. Some rain in the after part of the day in the evining the hunters returned with three buffalow Skins two goat Skins, four Deer Skins, two deer, & 3 wolve Skins, to be used in Covering the boat Canoes & to make mockersons, one Elk also killed to day

[Lewis:] *Monday July 8th 1805.*

Capt Clark Determined to make a second effort to replace the notes which he hād made with rispect to the river and falls accordingly he set out after an early breakfast and took with him the greater part of the men with a view also to kill buffaloe should there be any in that quarter. after geting some distance in the plains he divided the party and sent them in different directions and himself and two others struck the Missouri at the entrance of medicine river and continued down it to the great Cataract, from whence he returned through the plains to camp where he arrived late in the evening. the hunters also returned having killed 3 buffaloe 2 Antelopes and a deer. he informed me that the immence herds of buffaloe which we had seen for some time past in this neighbourhood have almost entirely disappeared and he beleives are gone down the river.

The day being warm and fair about 12 OCk the boat was sufficiently dry to receive a coat of the composition which I accordingly applyed. this adds very much to her appearance whether it will be effectual or not. it gives her hull the appearance of being formed of one solid piece. after the first coat had cooled I gave her a second which I think has made it sufficiently thick.[1]

The mountains which ly before us from the South, to the N.W. still continue covered with snow. one hunter also passed the river to hunt this morning in the evening he returned having killed a Buck and a male Antelope. The party who were down with Capt. Clark also killed a small fox which they brought with them. it was a female appeared to give suck, otherwise it is so much like the comm[on] small fox of this country commonly called the kit fox that I should have taken it for a young one of that species; however on closer examination it did apear to differ somewhat; it's colour was of a lighter brown, it's years proportionably larger, and the tale not so large or the hair not so long which formed it. they are very delicately formed, exceedingly fleet, and not as large as the common domestic cat. their tallons appear longer than any species of fox I ever saw and seem therefore prepared more amply by nature for the purpose of burrowing. ther is sufficient difference for discrimination between it and the kit fox, and to satisfy me perfectly that it is a distinct species. the men also brought me a living ground squirrel which is something larger than those of the U' States or those of that kind which are also common here. this is a much ha[n]dsomer anamal. like the other it's principal colour is a redish brown but is marked longitudinally with a much greater number of black or dark bro[w]n stripes; the spaces between which is marked by ranges of pure white circular spots, about the size of a brister blue shot. these colours imbrace the head neck back and sides; the tail is flat, or the long hair projecting horizontally from two sides of it only gives it that appearance. the belly and breast are of much lighter brown or nearly white.[1] this is an inhabitant of the open plain altogether, wher it burrows and resides; nor is it like the other found among clifts of rocks or in the woodlands. their burrows sometimes like those of the mole run horizontally near the surface of the ground for a considerable distance, but those in which they reside or take refuge strike much deeper in the earth. slight rain this afternoon. musquetoes troublesome as usual.

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[1] We called her the Experiment and expect she will answer our purpose. — GASS (p. 151).

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[1] The pale-striped spermophile (*Spermophilus tridecemlineatus pallidus*), a distinct variety from the common squirrel, technically classified in 1874. — Ed.

[Clark:] *July 8th Monday 1805*

A worm morning flying Clouds I deturmin [to] take the width of the river at the falls & the Medison river and to take the greater part of the men which Can be Speared to kill Buffalow for their Skins as well as meat, devided the party & Sent them in different directions to hunt & proceeded my Self to the mouth of Medison river measured it and found it to be 137 yards wide, in the narrowest part of the Missouri imediately above Medison river the Missouri is 300 yards wide, below and a little above the falls 1440 yards wide with the direction of the upper great fall 580 yards wide, at the great Spring 270 yards wide, at the handsom falls of 47 ft. 8 In. the river is 473 yards wide, at the lower great falls the river is confined within 280 yards, below the falls the water occupies 93 yards only. after takeing the wedth of the river at those Sundery placies I returned thro' the plains in a direct line to camp.[1] Some rain this evening after a verry hot day. the Mountains which are in view to the South & NW. are Covered with Snow. those nearer us and form a ¾ circle around us is not covered with Snow at this time. The hunters killed 3 buffalow, two antelopes, & a Deer to day. the emence herds of buffalow which was near us a fiew days ago, has proceeded on down the river, we can See but a fiew Bulls in the plains

[Lewis:] *Tuesday July 9th 1805.*

The morning was fair and ple[s]ant. the Islands seem crouded with blackbirds; the young brude is now completely feathered and flying in common with the others. we corked the canoes and put them in the water and also launched the boat; she lay like a perfect cork on the water. five men would carry her with the greatest ease. I now directed seats to be fixed in her and oars to be fitted. the men loaded the canoes in readiness to depart. just at this moment a violent wind commenced and blew so hard that we were obliged to unload the canoes again; a part of the baggage in several of them got wet before it could be taken out. the wind continued violent untill late in the evening, by which time we discovered that a greater part of the composition had seperated from the skins and left the seams of the boat exposed to the water and she leaked in such manner that she would not answer. I need not add that this circumstance mortifyed me not a little; and to prevent her leaking without pi[t]ch was impossible with us, and to obtain this article was equally impossible, therefore the evil was irraparable. I now found that the section formed of the buffaloe hides on which some hair had been left, answered much the best purpose; this leaked but little and the parts which were well covered with hair about ⅛th. of an inch in length retained the composition perfectly and remained sound and dry. from these circumstances I am preswaided, that had I formed her with buffaloe skins singed not quite as close as I had done those I employed, that she would have answered even with this composition. but to make any further experiments in our present situation seemed to me madness; the buffaloe had principally d[e]serted us, and the season was now advancing fast. I therefore relinquished all further hope of my favorite boat and ordered her to be sunk in the water, that the skins might become soft in order the better to take her in peices tomorrow and deposited the iron fraim at this place as it could probably be of no further service to us. had I only singed my Elk skins in stead of shaving them I beleive the composition would have remained and the boat have answered; at least untill we could have reached the pine country which must be in advance of us from the pine which is brought down by the water and which is probably at no great distance where we might have supplyed ourselves with the necessary pi[t]ch or gum. but it was now too late to introduce a remidy and I bid adieu to my boat, and her expected services. The next difficulty which presented itself was how we should convey the stores and baggage which we had purposed carrying in the boat. both Capt. Clark and myself recollected having heard the hunters (*Capt. Clark had previousley sent them in quest of timber for the purpose*) mention that the bottoms of the river some few miles above us were much better timbered than below

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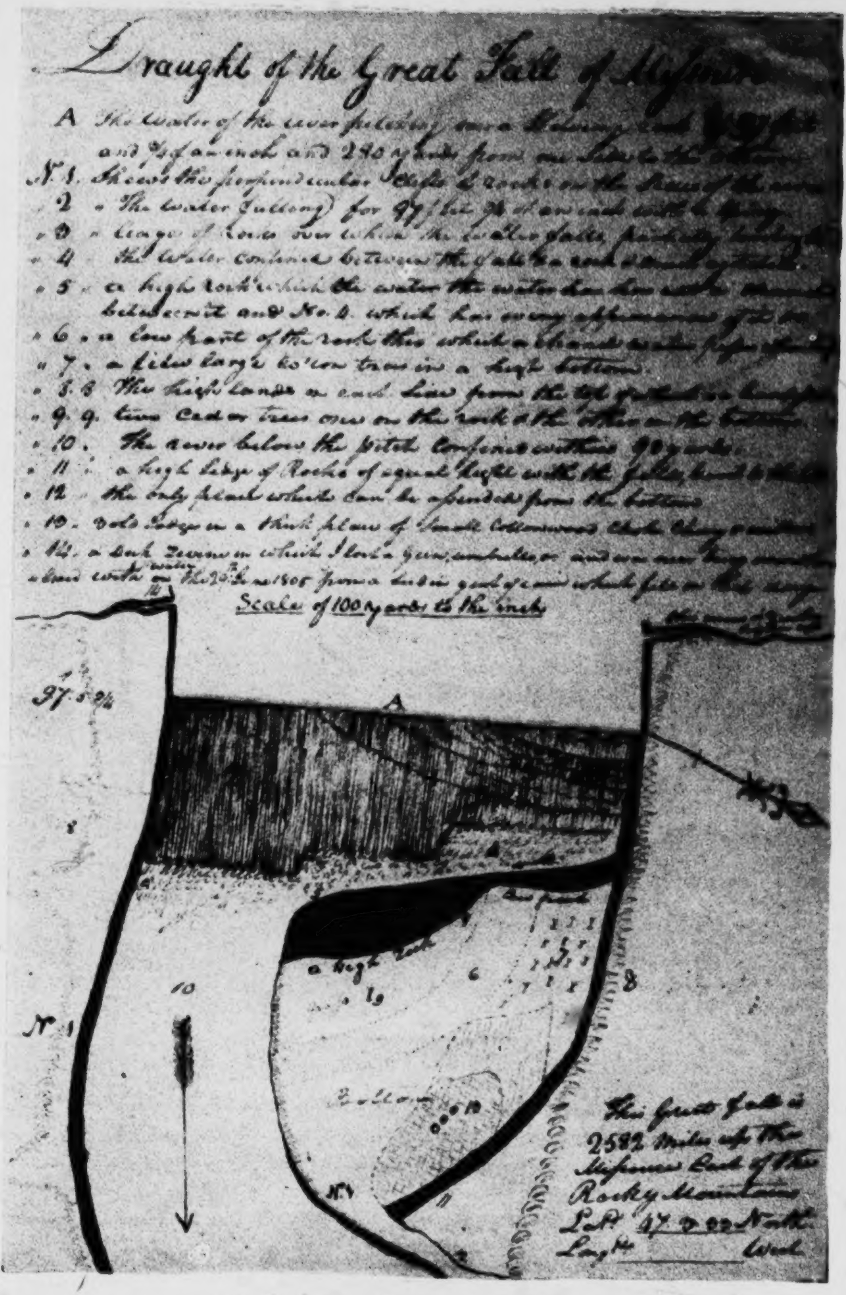
[1] In the weather diary for this date (Codex I, p. 23) Clark writes: "I finish taking the hight of the falls of the Missouri." — Ed.


Draught of the Great Fall
A
N° 1.
2
3
4
5
6
7 a few large cotton trees in a high bottom
8. 8
9. 9.
10. The river below the pitch confined within 90 yards
11
12 the only place which can be ascended from the bottom
13
14
Scale of 100 yards to the inch
97.5 3/4
A
8
10
N° 1
a high rock
6
9
8
Bottom
10
N° 4
11
This great fall is 2582 miles up the Missouri back of the Rocky Mountains
Lat 47 & 03 North
Longtd West

The Great Fall of the Missouri River, sketch-map by Clark.

and that some of the trees were large. the idea therefore suggested itself of building two other canoes sufficiently large to carry the surplus baggage. on enquiry of the hunters it seemed to be the general opinion that trees sufficiently large for this purpose might be obtained in a bottom on the opposite side about 8 miles distant by land and reather more than double that distance by water; accordingly Capt Clark determined to set out early in the morning with ten of the best workmen and proceede by land to that place while the others would in the mean time be employed by myself in taking the Boat in peices and depositing her, toge[the]r with the articles which we had previously determined to deposit at this place, and also in tra[n]sporting all the baggage up the river to that point in the six small canoes. this plan being settled between us orders were accordingly given to the party, and the ten men who were to accompany Capt Clark (*had*) ground and prepared their axes and adds this evening in order to prepare for an early departure in the morning. we have on this as well as on many former occasions found a small grindstone which I brought with me from Harper's ferry extreemly convenient to us. if we find trees at the place mentioned sufficiently large for our purposes it will be extreemly fortunate; for we have not seen one for many miles below the entrance of musselshell River to this place, which would have answered.

At our camp near the White bear Islands. July 3rd 1805.

Observed Equal altitudes of the ⊙ with Sextant.

	h	m	s		h	m	s	
A.M.	8.	16.	22.	P.M.	6.	6.	48.	Altitude at the time of observation 54° 49'. 45".
	".	17.	45.		".	3.	55.	
	".	19.	17.		".	5.	30.	

Chronometer too slow on Mean Time [blank space in MS.]

Observed Magnetic Azimuth of the ⊙. July 9th 1805.

Azimuth by Circumferenter		time by the Chronometer h	m	s	Altd of ⊙'s U.L. by Sextant.	
N. 73° E.	A.M.	8.	40.	7	62° 38.' 15".	Variation of the Magnetic nedle.
N. 74° E.		8.	44.	47.	63° 10. 00	

Equal Altitudes of the ⊙ with Sextant.

	h	m	s	P. M.	Altitude at the time of observation
A.M.	8.	48.	15.	lost by the interfer^{ce}. of Clouds	65°. 22′. 15.″
	".	49.	48.		
	".	51.	25.		

Observed Meridian Alt^{d}. of ⊙'s: L. L. with octant back Ob^{m}. 55°. 4′ —″.
Latitude deduced from this observation N. 47° 3′. 56″. $^{1}/_{10}$

[Clark:] *July 9th Tuesday 1805*

a clear worm morning wind from the SW. Lanced [launched] the Leather boat, and found that it leaked a little; corked Lanced & loaded the Canoes, burried our truck wheels, & made a Carsh [cache] for a Skin & a fiew papers I intend to leave here

on trial found the leather boat would not answer without the addition of Tar which we had none of, haveing Substituted *Cole & Tallow* in its place to Stop the Seams &c. which would not answer as it Seperated from the Skins when exposed to the water and left the Skins naked & Seams exposed to the water; this falur of our favourate boat was a great disapointment to us, we haveing more baggage than our Canoes would Carry. Concluded to build Canoes for to Carry them; no timber near our Camp. I deturmined to proceed on up the river to a bottom in which our hunters reported was large Trees &c.

[Lewis:] *Wednesday July 10th 1805.*

Cap^{t}. Clark set out with his party early this morning and passed over to the opposite side. after which I dispatched Serg^{t}. Ordway with 4 Canoes and 8 men to take up a load of baggage as far as Cap^{t}. Clark's camp and return for the remainder of our plunder. with six others I now set to work on my boat, which had been previously drawn out of the water before the men departed, and in two hours had her fraim in readiness to be deposited. had a cash dug and deposited the Fraim of the boat, some papers and a few other trivial articles of but little importance. the wind blew very hard the greater part of the day. I also had the truck wheels buried in the pit which had been made to hold the tar. having nothing further to do I amused myself in fishing and caught a few small fish; they were of the species of white chub mentioned below the falls, tho' they are small and few in number. I had thought on my first arrival here that there were no fish in this part of the river. Cap^{t} Clark proceeded up the river 8 miles by land (distance by water 23¼) and found 2 trees of Cottonwood and cut them down; one proved to be hollow and split in falling at the upper part and was somewhat windshaken at bottom; the other proved to be much windshaken. he surched the bottom for better but could not find any he therefore determined to make canoes of those which he had fallen; and to contract their length in such manner as to clear the craks and the worst of the winds[ha]ken parts making up the deficiency by allowing them to be as wide as the trees would permit. they were much at a loss for wood to make axhandles. the Chokecherry is the best we can procure for this purpose and of that wood they made and broke thir 13 handles in the course of this part of a day. had the eyes of our axes been round they would have answered this country much better. the musquetoes were very troublesome to them as well as ourselves today. Serg^{t} Ordway proceeded up the river about 5 miles when the wind became so violent that he was obliged to ly by untill late in the evening when he again set out with the canoes and arrived within 3 miles of Cap^{t} Clark's Camp where he halted for the night. about five miles above whitebear camp there are two Islands in the river (*Qu*) covered with Cottonwood boxalder and some sweet willow also the undergrowth like that of the islands at this place.

Observed Equal Altitudes of the ⊙. with Sextant;

	h	m	s		h	m	s	
A.M.	8.	16.	9.	P.M.	6.	2.	20.	Altitude given at the times of observation 54° 49'. 45."
	".	17.	45.		".	3.	55.	
	".	19.	17.		".	5.	30.	

Chronometer too slow on Mean Time [blank^{h} space^{m} in^{s} MS.]

Observed Meridian Alt^{d} of ⊙'^{s} L.L. with Octant by the back observation } 55° 27.′ —″.

Latitude deduced from this observation N. 47° 3.′ 10.″

Observed time and distance of ☽'^{s} western limb from *a* Antares; ✱ West; with Sextant.

	Time.			Distance		Time			Distance
	h	m	s			h	m	s	
P.M.	10.	47.	21.	34° 12.′ 45.″	P.M.	10.	57.	7.	34° 16.′ 15.″
	"	50.	8.	" . 14. .		" .	59.	31.	" . 17. —.
	"	52.	38.	" . 14. 30.		" .	2.	11.	" . 18. 30.
	".	54.	49.	" . 15. 30		" .	4.	24.	" . 19. 15.

Observed time and distance of ☽'^{s} Western limb from Pegassi; ✱ East, with Sextant.

	Time			Distance		Time			Distance
	h	m	s			h	m	s	
P.M.	11.	47.	35.	73° 11.′ 15″.	Astro.	12.	11.	46	71° 3.′ 45″.
	"	51.	39.	" . 15. — .		".	14.	25.	" . 5. 30.
	".	54.	8.	" . 13. 45 .					

from the distance of this star I am doubtfull that it is not Pegassi therefore observed another.

This I think is most probably Pegassi; but the star appeared very small.

[Clark:] *July 10th Wednesday* 1805

a fair windey day wind hard the most of the day from the S.W. rained moderately all last night (by Showers) we dispatched Serj^{t} Ordway with 4 Canoes loaded & 8 men by water to assend as high as I should have found timber for Canoes & formed a Camp. I Set out with Serj^{t} Pryor four Choppers two Involeds & one man to hunt, Crossed to the St^{d} Side and proceeded on up the river 8 miles by land (distance by water 23¼ m^{s}) and found two Trees which I thought would make Canoes, had them fallen, one of them proved to be hollow & Split at one End & verry much *wind Shaken* at the other, the other much win[d]-shaken, we serched the bottoms for better trees and made a trial of Several which proved to be more indifferent. I deturmined to make Canoes out of the two first trees we had fallen, to Contract their length so as to clear the the hollow & winshakes, & ad to the width as much as the tree would allow. The Musquitors emencely noumerous & troublesom, Killed two deer & a goat The Canoes did not arrive as I expected, owing to the hard wind which blew a head in maney places. we ar much at a loss for wood to make ax helthes [helves], 13 hath been made & broken in this piece of a day by the four Choppers, no other wood but Cotton Box elder Choke Cherry and red arrow wood we Substitute the Cherry in place of Hickory for *ax helthes* ram rods, &c. &c.

[Lewis:] *Thursday July 11th 1805*

We had now nothing to do but wait for the canoes; as they had not returned I sent out some of the small party with me to hunt; in the evening they returned with a good quantity of the flesh of a fat buffaloe which they had killed. the canoes not arrived this evening. I saw several very large grey Eagles today they are half as large again as the common bald Eagle of this country. I do not think bald Eagle here qu[i]te so large as those of the U'States; the grey Eagle is infinitely larger and is no doubt a distinct species.[1] this evening a little before the sun set I heared two other discharges of this unaccoun[t]able artillery of the Rocky Mountains proceeding from the same quarter that I had before heard it. I now recollected the Minnetares making mention of the nois which they had frequently heard in the Rocky Mountains like thunder; and which they said the mountains made; but I paid no attention to the information supposing it either false or the fantom of a supersticious immagination. I have also been informed by the engages that the Panis and Ricaras give the same account of the Black mountains which lye West of them. this phenomenon the philosophy of the engages readily accounts for; they state it to be the bursting of the rich mines of silver which these mountains contain.

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[1] Coues asserts (*L. and C.*, ii, p. 409) that Lewis is here mistaken — that both the bald and the gray eagle are like those of other parts of the United States. — Ed.

This morning Capt. Clark dispatched Bratton to meet the canoes which were detained by the wind to get a couple of axes. he obtained the axes and returned in about two hours. this man has been unable to work for several days in consequence of a whitlow on one of his fingers; a complaint which has been very common among the men. one of the canoes arrived at Capt. Clark's camp about 10. A.M. this he had unloaded and se[n]t a few miles up the river for a buffaloe which had been killed, the party sent killed another in thir rout and brought in the flesh and skins of both. they were in good order; his hunters had also killed two deer and an Antelope yesterday. the three other canoes did not arrive untill late in the evening in consequence of the wind and the fear of weting their loads which consisted of articles much more liable to be injured by moisture than those which composed the load of that which arrived in the morning. Capt. C. had the canoes unloaded and ordered them to float down in the course of the night to my camp, but the wind proved so high after night that they were obliged to put too about 8 miles above and remain untill morning. Capt. C. kept the party with him busily engaged at the canoes. his hunters killed and brought in three very fat deer this evening.

[Clark:] *July 11th Thursday 1805*

a fair windey morning wind S.W. I dispatch W Bratton (who cannot work he haveing a tumer riseing on his finger) to Meat the Canoes & bring from them two axes, which is necessary for the work at the perogues or canoes, and is indespenceable he returned in about two hours & informed that one Canoe was within three Miles, about 1 oClock the Canoe which Bratton left arrived. haveing killed a Buffalow on the river above our camp, at which place the bend of the river below & that above is about 1 mile apart, I despatched Serjt. Pryor with 3 men in the canoe to get the meat they killed another buffalow near the one killed and brought the meat of both down. at Sunset the 3 remaining canoes arrived unloaded & returned imeadiately with orders to flote down to

Camp at the portage to night for the purpose of takeing up the remaining baggage. Musquetors verry troublesom, and in addition to their torments we have a Small Knat which is as disagreeable, our hunter killed 3 Deer to day one of them verry fat. all the men with me engaged about the Canoes hunting &c. &c.

[Lewis:] *Friday July 12th 1805.*

The canoes not having arrived and the wind still high I dispatched Sergt Gass with three men to join Capt Clark and assist in completing the canoes retaining only a few who in addition to those in the canoes that I expect every moment, will be sufficient to man the six canoes and take up all the baggage we have here at one load. I feel excessively anxious to be moving on. the canoes were detained by the wind untill 2 P.M. when they set out and arrived at this place so late that I thought it best to detain them untill morning. Bratton came down today for a cople of axes which I sent by him; he returned immediately. Sergt Gass and party joined Capt. Clark at 10 A.M. Capt C. kept all the men with him busily engaged some in drying meat, others in hunting, and as ma[n]y as could be employed about the canoes. Segt Pryor got his sholder dislocated yesterday, it was replaced immediately and is likely to do him but little injury; it is painfull to him today. the hunters with Capt C. killed three deer and two otter today. the otter are now plenty since the water has become sufficiently clear for them to take fish. the blue crested fisher, or as they are sometimes called the *Kingfisher*, is an inhabitant of this part of the country; this bird is very rare on the Missouri; I have not seen more than three or four of those birds during my voyage from the entrance of the Missouri to the mouth of Maria's river and those few were reather the inhabitants of streams of clerer water which discharged themselves into the Missouri than of that river, as they were seen about the entrances of such streams. Musquetoes extreemly troublesome to me today nor is a large black knat less troublesome which dose not sting, but attacks the eye in swarms and compells us to brush them off or have our eyes filled with them.[1] I made the men dry the ballance of the freshe meet which we had abo[u]t the camp, amounting to about 200 lbs.

Observed Equal Altitudes of the ⊙ with Sextant.

A.M.	10.	8.	31.	P.M.	4.	8.	6.	altitude given
	".	10.	11		".	9.	47.	at the time of observation
	".	12.	52.		".	11.	27.	92° 13.' 15.

h m s

Chronometer too [blank space in MS.] on mean Mean T [blank space in MS.]

[Clark:] *July 12th Friday 1805*

a fair windey morning wind from the S.W. all hands at work at Day light Some at the Canoes, & others drying meat for our voyage Despatched W Brattin to the lower Camp for two axes which are necessary to carry on our work at this place &c. Serjt. Pryors Sholder was put out of place yesterday Carrying Meat and is painfull to day. Wind hard all day dispatched 2 hunters, they returnd in the evening with three Deer & 2 orters [otters]. four men arrived from the lower Camp by land to assist at this place in building the Canoes &c. Musquetors & knats verry troublesom all day. a fiew wild pigions about our camp.

[Lewis:] *Saturday July 13th 1805.*

This morning being calm and Clear I had the remainder of our baggage embarked in the six small canoes and man[n]ed them with two men each. I now bid a cheerfull adue to my camp and passed over to the opposite shore. Baptiest La Page one of the men whom I had reserved to man the canoes being sick I sent Charbono in his stead by water and the sick man and Indian woman accompanyed me by land. from the head of the white bear Islands I passed in a S.W. direction and struck the Missouri at 3 Miles and continued up it to Capt. Clark's camp where I arrived about 9 A.M. and found them busily engaged with their canoes Meat &c. in my way I passed a very extraordinary Indian lodge, or at least the fraim of one; it was formed of sixteen large cottonwood poles each about fifty feet long and at their larger end which rested on the ground as thick as a man's body; these were arranged in a circular manner at bottom and equally distributed except the omission of one on the East side which I suppose was the entrance to the lodge; the upper part of the poles are united in a common point above and secured with large wyths of willow brush. in the center of this fabric there was the remains of a large fire; and about the place the marks of about 80 leather lodges. I knew not what was the intention or design of such a lodge but certain I am that it was not designed for a dwelling of any one family. it was 216 feet in circumpherence at the base. it was most probably designed for some great feast, or a council house or some great national concern. I never saw a similar one nor do the nations lower down the Missouri construct such.

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[1] Coues identifies this as the buffalo-gnat, a species of *Simulium*. — Ed.

The canoes and party with Sergt. Ordway p[r]oceeded up the river about 5 miles when the wind became so violent that two of the canoes shiped a considerable quant[it]y of water and they were compelled to put too take out the baggage to dry and clense the canoes of the water. about 5 P.M. the wi[n]d abated and they came on about 8 miles further and encamped. I saw a number of turtledoves and some pigeons today. of the latter I shot one; they are the same common to the United States, or the wild pigeon as they are called. nothing remarkable in the appearance of the country; the timber entirely confined to the river and the country back on either side as far as the eye can reach entirely desittute of trees or brush. the timber is larger and more abundant in the bottom in which we now are than I have seen it on the Missouri for many hundred miles. the current of the river is still extreemly gentle. The hunters killed three buffaloe today which were in good order. the flesh was brought in dryed the skins wer also streached for covering our baggage. we eat an emensity of meat; it requires 4 deer, an Elk and a deer, or one buffaloe, to supply us plentifully 24 hours. meat now forms our food prinsipally as we reserve our flour parched meal and corn as much as possible for the rocky mountains which we are shortly to enter, and where from the indian account game is not very abundant. I preserved specemines of several small plants today which I have never before seen. The Musquetoes and knats are more troublesome here if possible than they were at the White bear Islands. I sent a man to the canoes for my musquetoe bier which I had neglected to bring with me; as it is impossible to sleep a moment without being defended against the attacks of these most tormenting of all insects; the man returned with it a little after dark.

[Clark:] *July 13th Satturday* 1805

a fair Calm Morning, verry cool before day. we were visited by a Buffalow Bull who Came within a fiew Steps of one of the Canoes as the men were at work. Capt Lewis one man &c. arrived over Land at 9 oClock, the wind rose and blew hard from the S.E. the greater part of the day both Canoes finished all to Corking & fixing ores &c. &c.

The Hunters killed 3 Buffalow the most of all the meat I had dried for to make Pemitigon.[1] The Musquetors & knats verry troublesom all day & night

[Lewis:] *Sunday July 14th* 1805.

This morning was calm fair and warm; the Musquetoes of course troublesome. all hands that could work were employed about the canoes. which completed and launched this evening. the one was 25 feet and the other 33 feet in length and about 3 feet wide. we have now the seats and oars to make and fit &c. I walked out today and ascended the bluffs which are high rockey and steep; I continued my rout about 3½ when I gained a conspicuous eminence about 2 Ms distant from the river a little below the entrance of Fort Mountain Creek. from this place I had a commanding view of the country and took the bearings of the following places. (viz)

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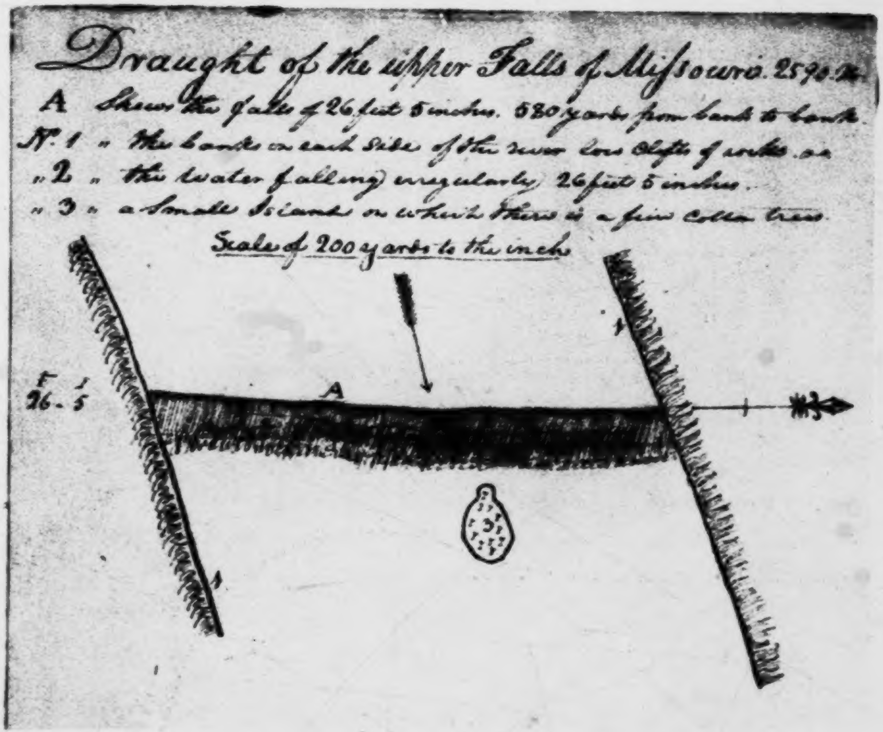
[1] Better known as pemmican — dried and pounded meat, mixed with fat. — Ed.


Draught of the upper Falls of Miſsouri. 2590 M.
A Shews the falls of 26 feet 5 inches. 580 yards from bank to bank
No. 1 " the banks on each side of the river low Clifts of rocks. &c
" 2 " the water falling irregularly 26 feet 5 inches.
" 3 " a Small Island on which there is a few cotton trees.
Scale of 200 yards to the inch
F I
26 - 5
A
1
1
3

The Upper Falls of the Missouri River,
sketch-map by Clark.

To the point at which the Missouri first enters the Rocky Mountains S. 28°. W. 25. Miles

To the termineation of the 1st. Chain of Rocky Mountains northwardly, being that through which the Missouri first passes N. 73°. W. 80.

To the extremity or tirmineation of 2nd Chain of the Rocky Mountains N. 65. W. 150

To the most distant point of a third and continued chain of the same Mts. N. 50°. W. 200.

The direction of the 1st. Chain of Rocky Mounts. from S. 20. E. to N. 20. W.

The direction of the 2nd. Do. from S 45 E. to N. 45. W.

☞ the Southern extremities of these ranges not visible and believe they continue probably to Mexico

To Fort mountain S. 75°. W. 8.

The country in most parts very level and in others swelling with gentle rises and decents, or in other wirds what I have heretofore designated a wavy country destitute of timber except along the water-courses. On my return to camp found Sergt. Ordway had arrived with all the canoes about noon and had unloaded them every preperation except the entire completion of the oars poles &c. is made for our departure tomorrow. the grass and weeds in this bottom are about 2 feet high; which is a much greater hight than we have seen them elsewhere this season. here I found the sand rush and nittles in small quantities. the grass in the plains. is not more than 3 inches high. grasshoppers innumerable in the plains and the small birds before noticed together with the brown Curloo still continue nomerous in every part of the plains. had a slight shower at 4 P.M. this evening.

[Clark:] *July 14th Sunday 1805*

a fine morning calm and worm Musquetors & Knats verry troublesom. The Canoes arrive at 12 oClock & unloade to Dry &c. finished & Lanced [launched] the 2 Canoes, Some rain this afternoon. all prepareing to Set out on tomorrow.

CHAPTER XII

FROM THE GREAT FALLS TO THE THREE FORKS

Lewis's Journal, July 15–27, 1805
Clark's Journal, July 15–27

[Lewis:] *Monday July 15th 1805*

WE arrose very early this morning, assigned the canoes their loads and had it put on board. we now found our vessels eight in number all heavily laden, notwithstanding our several deposits; tho' it is true we have now a considerable stock of dryed meat and grease. we find it extreemly difficult to keep the baggage of many of our men within reasonable bounds; they will be adding bulky articles of but little uce or value to them. At 10 A.M. we once more saw ourselves fairly under way much to my joy and I beleive that of every individual who compose the party. I walked on shore and killed 2 Elk near one of which the party halted and dined. we took the skins marrowbones and a part of the flesh of these Elk. in order to lighten the burthen of the canoes I continued my walk all the evening and took our only invalledes Potts an[d] La Page with me. we passed the river near where we dined and just above the entrance of a beautifull river 80 yards wide which falls in on the Lard side in honour of Mr. Robert Smith the Secretary of the Navy we called [it] Smith's River.[1] this stream meanders through a most lovely valley to the S.E. for about 25 miles when it enters the Rocky mountains and is concealed from our view. many herds of buffaloe were feeding in this valley. we again crossed the river to the Stard side and passed through a plain and struck the river at a Northwardly bend where there was timber here we waited untill the canoes arrived by which time it was so late that we concluded to encamp for the night.[1] here Drewyer wo[u]nded a deer which ran into the river my dog pursued caught it drowned it and brought it to shore at our camp. we have now passed Fort Mountain on our right it appears to be about ten miles distant. this mountain has a singular appearance it is situated in a level plain, it's sides stand nearly at right angles with each other and are each about a mile in extent. these are formed of a yellow clay only without the mixture of rock or stone of any size and rise perpendicularly to the hight of 300 feet. the top appears to be a level plain and from the eminence on which I was yesterday I could see that it was covered with a similar coat of grass with the plain on which it stands. the surface appears also to possess a tolerable fertile mole [mold] of 2 feet thick. and is to all appearance inaccessible. from it's figure we gave it the name of fort mountain. those mounds before mentioned near the falls have much the same appearance but are none of them as large as this one. the prickly pear is now in full blume and forms one of the beauties as well as the greatest pests of the plains. the sunflower is also in blume and is abundant. this plant is common to every part of the Missouri from it's entrance to this place. the lambsquarter,[2] wild coucumber, sand rush and narrow dock are also common here. Drewyer killed another deer and an Otter today. we find it inconvenient to take all the short meanders of the river which has now become c[r]ooked and much narrower than below, we therefore take it's general course and lay down the small bends by the eye on our daily traverse or chart. the river is from 100 to 150 y^{ds}. wide. more timber on the river than below the falls for a great distance. on the banks of the river there are many large banks of sand much elivated above the plains on which they ly and appear as if they had been collected in the course of time from the river by the almost incessant S.W. winds; they always appear on the sides of the river opposite to those winds.

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[1] On some maps called also Deep River. — ED.

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[1] At a place 3¾ miles below Little Muddy Creek. — Ed.

[2] *Chenopodium album.* The narrow-dock is *Rumex salicifolius.* — Ed.

The [cour]ses and distances from the White bear islands to the camp at which we made the canoes as taken by Serg^{t} Ordway.

S. 10° E.	1 ½	to a point of low trees on the Lar^{d} side passing a willow island on Lar^{d} side
S. 36° E.	1.	to a point of wood on the Star^{d} side
South.	1.	to a clift of rocks in a bend on Lar^{d} side
S. 45° W.	1 ½	to some trees in a bend, passing a timbered isla[n]d on the Star^{d} side.
South	1 ¼	to a point of low timber on Star^{d} side
S. 24. W.	1.	to a bunch of bushes on the Lar^{d} side
West	2.	to a grove of trees in a Lar^{d} bend
N. 26° W.	2.	to a point of wood on the Lar^{d} side
North	1.	Along the Lar^{d} point
N. 20° W.	1 ½	to a small Creek Lar^{d} side
S. 45° W.	¾	to the lower point of a timbered Is^{ld} S. S.
S. 10° E.	1 ½	opposite the island on the Lar^{d} side
S. 16° W.	¾	to a point above the Island Lar^{d} side.
South –	1 ½.	to a point of low timber on the Star^{d} side opposite to a bluff on Lar^{d} side
West	½	to a tree in a Lar^{d} bend.
North –	½	to a point of timbered land on Lar^{d} side
N. 12° W.	1	to a point on Lar^{d} side
West	1 ½	to a point on the Star^{d} side.
N. 16° W.	½	to a point of timber on Lar^{d} side
N. 60° W.	½	along the lar^{d} point, passing a large sand bar on Lar^{d} side.
S. 54° W.	½	to a point of woodland Star^{d} side where we built two canoes. —
Miles	23.¼	

Courses and distances July 15th 1805.

S. 45° W.	¼	to the upper part of the timber Star^{d} side
S. 60° E.	¾	to a bend on the Lar^{d} side
S. 20° W.	½	along the lar^{d} side in the bend
N. 70° W.	1½	to a point on the Star^{d} side passing an Is^{ld}
South	¾	to a lard. bend passing the entrance of Fort Mountain creek at the commencement of this course no water at present 10 y^{ds} w.
S. 30° W.	2¼	to a bend on the Star^{d} side oposite an Island passing a Star^{d} and Lar^{d} point.

West	1½	to the lower point of the woodland at the entrance of Smith's river, which is 80 yds. wide and falls in on Lard. in a bend
N. 45° W.	1¾.	to a Stard bend.
South	3	to the head of an Island in the Lard. bend passing over the Lard. point.
N. 45° W.	1¼	to a stard. bend.
West	½	in the stard. bend.
South	¾	in the Stard. bend.
S. 45° E.	¾	in the Stard. bend.
East	1.	in the Stard bend passing an island Lard. side
S. 45° E	¾	on the Lard. side.
West	2½	to a wood in the Stard. bend. where we encamped for the evening.
Miles	19¾	

[Clark:]

July 15th Monday 1805

rained all the last night, I was wet all night, this morning wind hard from the S.W. we Set out at 10 oClock and proceeded on verry well passed a river on the Lard Side about 80 yards wide which we call after the Secty. of the Navey Smiths River. the river verry crooked bottoms extensive rich and Passes thro' a butifull Vally between 2 Mts. [and] Cont. high grass, our Canoes being so Small Several of the men Capt. Lewis & myself Compelled to walk on Shore & cross the bends to keep up with the Canoes a round mountain on our right abt. 10 miles appears inaxcessable we call fort mountain. The Prickley Pear in bloom but fiew other flowers. Sunflowrs are common, also lambs quarter & Nettles. Capt Lew[is] killed 2 Elk & the hunters killed 2 Deer & a ortter, we camped on the Stard Side at which place I saw many beaver, the timber on the edge of the river more Common than below the falls. as I am compelled to walk on Shore find it verry dificuelt to take the Courses of the river, as it is verry crooked more so than below

[Lewis:]

Tuesday July 16th 1805.

We had a heavy dew last night sen[t] one man back this morning for an ax that he had carelessly left last evening some miles below, and set out at an early hour. early this morning we passed about 40 little booths formed of willow bushes to shelter them from the sun; they appeared to have been deserted about 10 days; we supposed that they were snake Indians. they appeared to have a number of horses with them. this appearance gives me much hope of meeting with these people shortly. Drewyer killed a buffaloe this morning near the river and we halted and breakfasted on it. here for the first time I ate of the small guts of the buffaloe cooked [*Qu?*] over a blazing fire in the Indian stile without any preperation of washing or other clensing and found them very good. After breakfast I determined to leave Cap^{t}. C. and party, and go on to the point where the river enters the Rocky Mountains and make the necessary observations against their arrival; accordingly I set out with the two invalleds Potts and LaPage and Drewyer; I passed through a very handsome level plain on the Star^{d}. side of the river, the country equally level and beautifull on the opposite side; at the distance of 8 M^{ls}. passed a small stream on which I observed a considerable quantity of aspin. a little before 12 I halted on the river at a Star^{d}. bend and well timbered bottom about 4½ miles below the mountains and made the following observation.

Point of observation N^{o}. 30.

Observed Meridian Alt^{d}. of ⊙'^{s}. L. L. with Octant by the back Observation. } 56°. 38.' –".

Latitude deduced from this observation. N. 46. 46. 50.2

after this observation we pursued our rout through a high roling plain to a rappid immediately at the foot of the mountain where the Missouri first enters them.[1] the current of the missouri below these rappids is strong for several miles, tho' just above there is scarcely any current, the river very narrow and deep abo[u]t 70 y^{ds}. wide only and seems to be closely hemmed in by the mountains on both sides, the bottoms only a few yards in width. an Indian road enters the mountain at the same place with the river on the Star^d side and continues along it's border under the steep clifts these mountains appear to be only about 800 feet above the river and are formed almost entirely of a hard black grannite. with a few dwarf pine and cedar scattered on them. at this place there is a large rock of 400 feet high w[h]ich stands immediately in the gap which the missouri makes on it's passage from the mountains; it is insulated from the neighbouring mountains by a handsome little plain which surrounds it[s] base on 3 sides and the Missouri washes it's base on the other, leaving it on the Lard. as it decends. this rock I called the tower. it may be ascended with some difficulty nearly to it's summit, and from it there is a most pleasing view of the country we are now about to leave. from it I saw this evening immence herds of buffaloe in the plains below. near this place we killed a fat elk on which we both dined and suped. the Musquetoes are extreemly troublesome this evening and I had left my bier, of course suffered considerably, and promised in my wrath that I never will be guil[t]y of a similar peice of negligence while on this voyage.[1]

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[1] This was at the Half-breed Rapids; and Lewis encamped that night near Hardy, Montana. — Ed.

[Clark:] *July 16th Tuesday 1805*

a fair morning after a verry cold night, heavy dew, dispatched one man back for an ax left a fiew miles below, and Set out early Killed a Buffalow on which we Brackfast Cap^t Lewis & 3 men went on to the mountain to take a meridian altitude, passed about 40 Small Camps, which appeared to be abandoned about 10 or 12 days, Suppose they were Snake Indians, a fiew miles above I Saw the poles Standing in their position of a verry large lodge of 60 feet Diameter, & the appearance of a number of Leather Lodges about, this Sign was old & appeared to have been last fall great number of buffalow the river is not So wide as below from 100 to 150 yards wide & Deep Crouded with Islands & Crooked Some scattering timber on its edge Such as Cotton wood Cotton willow, willow and box elder, the S[h]rubs are arrow wo[o]d red wood, Choke cherry, red berries, Goose beries, Sarvis buries, red & yellow Currents a Sp[e]cie of Shomake &c.

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[1] Codex E ends at this point; it is followed by Codices F and G, which have in the present publication been interwoven day by day (they run parallel chronologically), F being Lewis's record, and G Clark's. — ED.

I camped on the head of a Small Island near the Star^{d} Shore at the Rockey Mountains this Range of mountains appears to run NW & SE and is about 800 feet higher than the Water in the river faced with a hard black rock the current of the River from the Medison river to the Mountain is gentle, bottoms low and extensive, and its General Course is S. 10°. W. about 30 miles on a direct line

Course Distances &c. from White bear Island Camp to the mountains. July 13th 14th 15th & 16. 1805

	miles	
S 10° E	1 ½	to a point of low trees on the Lar^{d} Side passed a Willow Island L.S.
S 36° E	1	to a point of wood on the Star^{d} Side
South	1	to a Clift of rocks in a bend on the L.S.
SW	1 ½	to Some trees in a bend passed a timbered Island on the St^{d} Side
South	1 ¼	to a point of low wood St^{d} Side
S. 24° W	1	to a bunch of bushes on the L.S.-
West	2	to a grove of trees in a bend L.S.
N. 26° W.	2	to a point of wood on the L.S.
North	1	allong the Lar^{d} point
	12 ¼	

14

N. 20° W	1 ½	to a Creek on the Lar^{d} Side
S.W.	¾	to the lower point of an Island. S.S.
S. 10° E	1 ½	opposit the Island on the L.S.
S. 16° W.	¾	to a point above the Island L. Side.
South	1 ½	to point of low timber on the Star^{d} Side a Bluff & rocks on L.S.
West	½	to a tree in a bend on the L. Side
North	½	to a point of wood on the L. Side

N. 12° W.	1	to a point on the Lar^d Side
West	1 ½	to a point on the Star^d Side
N. 16° W	½	to a point of wood on the L. Side
N. 60° W.	½	along Said point, passing a large Sand bar L.S.
S. 54° W.	½	to a point of wood Star^d Side at which place I built 2 Canoes.
	23 ¼	

15

SW	¼	to the upper part of a wood S^t Side
S. 60° E	¾	to a bend on the Lar^d Side
S. 20° W.	½	on the Lar^d Side in the bend
N. 70° W.	1 ½	to a point on the Star^d Side passed an Island
South	¾	to the Lar^d Bend
S. 30° W.	2 ¼	to a bend on the Star^d Side ops^d an Isl^d passed a Star^d & Lar^d point
West	1 ½	to the lower point of a wood at the mouth of Smiths river in the Lar^d bend 80 yards wide
N. 45° W	1 ¾	to the Star^d bend
South	3	to the head of an Island in the Lar^d bend passing over the Lar^d point
N. 45° W	1 ¼	to the Star^d bend
West	½	in the Star^d bend
South	¾	in the Star^d bend
S 45° E	¾	in the Star^d bend
East	1	in the Star^d bend pass^d an Isl^d L.S.
SE	¾	on the Lar^d Side
West	2 ½	to a wood in the St^d bend
	43	

16th

S 30· E	1 ½	to trees on the Lar^d bend
West	1 ½	to the Star^d bend passing over a S^d pt.
S. 10° E	¾	to the mouth of a run Lar^d bend
SW	1 ½	to a bend on the Star^d Side
S. 15° E	½	to a bend on the Lar^d Side.
SW.	2	to the mouth of a run on St^d Side
SE.	1	to a bend Lar^d Side (ops^d a big Lodge)
South	1	on the Lar^d Side in a bend opposit an Island
S. 70° W	1	in the Lar^d bend
	53 ¾	

S. 30° W	1	in the bend to the Lar^{d} Side
South	¾	in the bend to the Lar^{d} Side
N. 30° W	1 ¼	to a bend on the Star^{d} Side passed a Small Island
South	4	to the Lower point of a timber on the Star^{d} Side passed 6 Islands
S. 60° E.	½	to the bend on the Lar^{d} Side
S 50° W	1 ½	to the upper point of an Island
S 18° E	1	to the lower point of an Island
SW	2	to a Bayou on the S.S. passed an Isl^{d}
South	¼	to the Lar^{d} bend enca[m]ped on the upper point of the island

17th

West	1 ½	to a Spur of the rocky Mountain in a bend to the Star^{d} Side
S. 10° E	1 ¼	to a Spur of the d^{o} on the L. Side
S. 60° W.	2	to a Small Island in the bend to the Star^{d} Side
South	¼	to a pine tree on the lower point of an Island above a rapid, at the mountains. high rocks on each side
miles	71	

[Lewis:] *Wednesday July 17th 1805.*

The sunflower is in bloom and (*copy for D^{r} Barton.*) abundant in the river bottoms. The Indians of the Missouri particularly those who do not cultivate maze make great uce of the seed of this plant for bread, or use it in thickening their soope. they most commonly first parch the seed and then pound them between two smooth stones untill they reduce it to a fine meal. to this they sometimes mearly add a portion of water and drink it in that state, or add a sufficient quantity of marrow grease to reduce it to the consistency of common dough and eate it in that manner. the last composition I think much best and have eat it in that state heartily and think it a pallatable dish. there is but little of the broad leafed cottonwood above the falls, much the greater portion being of the narrow leafed kind. there are a great abundance of red yellow perple & black currants, and service berries now ripe and in great perfection. I find these fruits very pleasent particularly the yellow currant which I think vastly preferable to those of our gardens. the shrub which produces this fruit rises to the hight of 6 or 8 feet; the stem simple branching and erect. they grow closly ascociated in cops either in the oppen or timbered lands near the watercou[r]ses. the leaf is petiolate of a pale green and resembles in it's form that of the red currant common to our gardens. the perianth of the fructification is one leaved, five cleft, abreviated and tubular, the corolla is monopetallous funnel-shaped, very long, superior, withering and of a fine orrange colour. five stamens and one pistillum; of the first, the fillaments are capillare, inserted into the corolla, equal, and converging; the anther ovate, biffid and incumbent. with rispect to the second the germ is roundish, smo[o]th, inferior pedicelled and small; the style, long, and thicker than the stamens, simple, cylindrical, smooth, and erect, withering and remains with the corolla untill the fruit is ripe. stigma simple obtuse and withering. the fruit is a berry about the size and much the shape of the red currant of our gardins, like them growing in clusters supported by a compound footstalk, but the peduncles which support the several berries are longer in this species and the berries are more scattered. it is quite as transparent as the red current of our gardens, not so ascid, & more agreeably flavored. the other species differ not at all in appearance from the yellow except in the colour and flavor of their berries. I am not confident as to the colour of the corolla, but all those which I observed while in blume as we came up the Missouri were yellow but they might possibly have been all of the yellow kind and that the perple red and black currants here may have corollas of different tints from that of the yellow currant. The survice berry differs somewhat from that of the U. States the bushes are small sometimes not more than 2 feet high and scarcely ever exceed 8 and are proportionably small in their stems, growing very thickly ascosiated in clumps. the fruit is the same form but for the most part larger more lucious and of so deep a perple that on first sight you would think them black. there are two species of goosbirris here allso but neither of them yet ripe. the choke cherries also abundant and not yet ripe. there is Boxalder, red willow and a species of sumac here also. there is a large pine tree situated on a small island at the head of these rappids above our cam[p]; it being the first we have seen for a long distance near the river I called the island *pine island.* This range of the rocky mountains runs from S E to N.W. at 8 A.M. this morning Capt. Clark arrived with the party. we took breakfast here, after which I had the box which contained my instruments taken by land arround tower rock to the river above the rappid; the canoes ascended with some difficulty but without loss or injury, with their loads.

Point of observation N^{o} 31.

At my camp on the Star^{d} side of the Missouri below the rappids where the river fi[r]st enters the Rocky Mountains

Observed time and distance of ⊙'s and ☽'s nearest limbs with Sextant, ⊙ East.

	Time			Distance				Time			Distance		
	h	'	"	°	'	"		h	m	s	°	'	"
A.M.	8.	14.	43	115.	0 .	0.	A.M.	8.	34.	51	114.	52.	00
	".	17.	32	115.	0 .	0.		".	35.	43	".	51.	15.
	".	19.	14	114.	57.	45.		".	38.	10	".	50.	30.
	".	21.	29	".	57.	0.		".	39.	47	".	49.	45.
	".	22.	39.	".	57.	0.		".	41.	30	".	48.	45.
	".	23.	38	".	56.	45.		".	42.	34	".	48.	30
	".	26.	18	".	55.	15.		".	43.	52	".	48.	30
	".	27.	35	".	54.	45.		".	44.	16	".	48.	00.

Point of Observation N^{o} 33.

On the Star^{d} side of the Missouri one mile above the point of observation of this morning.

Observed Meridian Altitude of ⊙'s L. L. with Octant by the back observation } 56° 50'.

Latitude deduced from this observation 46° 42' 14" 7

After making those observations we proceed, and as the canoes were still heavy loaded all persons not employed in navigating the canoes wall[k]ed on shore. the river clifts were so steep and frequently projecting into the river with their perpendicular points in such manner that we could not pass them by land, we were therefore compelled to pass and repass the river very frequently in the cou[r]se of the evening. the bottoms are narrow the river also narrow deep and but little current. river from 70 to 100 yds wide. but little timber on the river aspin constitutes a part of that little. see more pine than usual on the mountains tho' still but thinly scattered. we saw some mountain rams or bighorned anamals this evening, and no other game whatever and indeed there is but little appearance of any. in some places both banks of the river are formed for a short distance of nearly perpendicular rocks of a dark black grannit of great hight; the river has the appearance of having cut it's passage in the course of time through this solid rock. we ascended about 6 miles this evening from the entrance of the mountain and encamped on the Stard. side where we found as much wood as made our fires.[1] musquetoes still troublesome knats not as much so. Capt. C. now informed me that after I left him yesterday, he saw the poles of a large lodge in praire on the Stard. side of the river which was 60 feet in diameter and appeared to have been built last fall; there were the remains of about 80 leather lodges near the place of the same apparent date. this large lodge was of the same construction of that mentioned above the white bear Islands. the party came on very well and encamped on the lower point of an island near the Stard. shore on that evening. this morning they had set out early and proceeded without obstruction untill they reached the rappid where I was encamped.

Courses and Distances of the 16th. July 1805.

S. 30° E.	1 ½	to some trees in a Lard. bend.
West.	1 ½	to a Stard. bend passing over a Stard. point.
S. 10° E. –	¾	to the mouth of a run in a Lard. bend
S. 45° W.	1 ½	to a bend on Stard. side.
S. 15° E.	½	to a bend on the Lard. side.
S. 45° W.	2.	to the mouth of a run on Stard. side
S. 45° E.	1.	to a bend on Lard. side opposite a large lodge
South –	1.	along the Lard. side in a bend opposite an island
S. 70° W.	1.	in a Lard. bend.

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[1] Near a place on the Montana Central Railway now called Mid Cañon, seven miles by rail below Craig, and three miles below the mouth of Dearborn's River. — Ed.

S. 30° W.	1.	in a bend on the Lar^{d} side.
South	¾.	in the Lar^{d} bend
N. 30° W.	1 ¼	to a bend on Star^{d} passing a small island
South	4.	to the lower point of some timber on Star^{d} side passing 6 islands.
S. 60° E.	½	to a bend on Lar^{d} side
S. 50° W.	1 ½	to the upper point of an island
S. 18° E.	1	to the lower point of an island
S. 45° W.	2	to a bayou on Star^{d} passing an island
South –	¼.	to a lar^{d} bend, encamped on the upper point of the Island near Star^{d} shore
Miles	23.	

Cou[r]ses and distances July 17th 1805.

West.	1 ½	to a spur of the rocky Mountains in a ben[d] St^{d}	
S. 10° E.	1 ¼	to a spur of D° D° on the Lar^{d} side	
S. 60° W.	2.	to a small Island in a bend on Star^{d} side	
South	¼.	to a large pine tree on the lower point of pine Island above the rappids where the river enters the rocky Mountains.	
S. 20° W.	–.¾	to a high clift of the mountain on Lar^{d} side passing pine island at ¼ M. a small run on Lar^{d} just above the island, and a Lar^{d} & Star^{d} point.	
West .	¼.	to a bend on the Star^{d} side,	high clifts on either side
South –	¼.	to a bend on Lar^{d} side	D° d°
N. 60° E.	½	to a bend on the Star^{d} side	d° d° pass^{d} an Is^{ld}
S. 20° W.	½.	to a bend on the Lar^{d} side	d° d°
West	½.	to a bend on the Star^{d} side	d° d°
S. 30° E.	1.	to a bend on the Lar^{d} side	d° d° passing an Is^{d}
West	1 ¼	to a bend on the Star^{d} side	bottoms reather wider
S. 5° W. – –	½	to a point of rocks in a Lar^{d} bend.	
N. 75° W.	¾	to a bend on the Star^{d} side, opposite a very high clift where we encamped for the evening.[1]	
Miles	11.¼		

July 17th Wednesday 1805

[Clark:]

Set out early this morning and crossed the rapid at the Island cald. pine rapid with Some dificuelty, at this rapid I came up with Cap^{t} Lewis & partey took a Med^{n} altitude &

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[1] Evidently the "Big Rock" of the Missouri River Commission map. — O. D. WHEELER.

we took Some Luner Observations &c. and proceeded on, the emence high Precipces oblige all the party to pass & repass the river from one point to another the river confined in maney places in a verry narrow chanel from 70 to 120 yards wide bottoms narrow without timber and maney places the Mountain[s] approach on both Sides, we observe great deel of Scattering pine on the Mountains, Some aspin, Spruce & *fur* trees took a meridian alt^{d} which gave for Lattitude *46° – 42′. 14″ 7/10 N* We proceeded on verry well about 8 miles & Camped on the Star^{d} Side. The river crooked bottoms narrow, Clifts high and Steep, I assended a Spur of the Mountain, which I found to be highe & dificuelt of axcess, Containing Pitch Pine & Covered with grass Scercely any game to be seen. The yellow Current now ripe also the fussey [fuzzy] red Choke Cheries getting ripe. Purple Current[s] are also ripe. Saw Several Ibix or mountain rams to day

[Lewis:] *Thursday July 18th 1805.*

Set out early this morning. previous to our departure saw a large herd of the Bighorned anamals on the immencely high and nearly perpendicular clift opposite to us; on the fase of this clift they walked about and bounded from rock to rock with apparent unconcern where it app[e]ared to me that no quadruped could have stood, and from which had they made one false step the[y] must have been precipitated at least a 500 feet. this anamal appears to frequent such precepices and clifts where in fact they are perfectly secure from the pursuit of the wolf, bear, or even man himself. at the distance of 2½ miles we passed the entrance of a considerable river on the Star^{d} side; about 80 y^{ds} wide being nearly as wide as the Missouri at that place. it's current is rapid and water extreamly transparent; the bed is formed of small smooth stones of flat rounded or other figures. it's bottoms are narrow but possess as much timber as the Missouri. the country is mountainous and broken through which it passes. it appears as if it might be navigated but to what extent must be conjectural. this handsome bold and clear stream we named in honour of the

Secretary of war[1] calling it Dearborn's river. as we were anxious now to meet with the Sosonees or snake Indians as soon as possible in order to obtain information relative to the geography of the country and also if necessary, some horses we thought it better for one of us either Capt. C. or myself to take a small party & proceed on up the river some distance before the canoes, in order to discover them, should they be on the river before the daily discharge of our guns, which was necessary in procuring subsistence for the party, should allarm and cause them to retreat to the mountains and conceal themselves, supposing us to be their enemies who visit them usually by the way of this river. accordingly Capt. Clark set out this morning after breakfast with Joseph Fields, Pots and his servant York. we proceeded on tolerably well; the current st[r]onger than yesterday; we employ the cord and oars principally tho' sometimes the setting pole. in the evening we passed a large creek about 30 yds. wide which disembogues on the Stard. side; it discharges a bold current of water it's banks low and bed formed of stones altogether; this stream we called Ordway's creek[2] after Sergt. John Ordway. I have observed for several days a species of flax growing in the river bottoms the leaf stem and pericarp of which resembles the common flax cultivated in the U.States.[3] the stem rises to the hight of about 2½ or 3 feet high; as many as 8 or ten of which proceede from the same root. the root appears to be perennial. the bark of the stem is thick strong and appears as if it would make excellent flax. the seed are not yet ripe but I hope to have an opportunity of collecting some of them after they are so. if it should on experiment prove to yeald good flax and at the same time admit of being cut without injury the perennial root it will be a most valuable plant, and I think there is the greatest probability that it will do so, for notwithstanding the seed have not yet arrived at maturity it is puting up suckers or young shoots from the same root and would seem therefore that those which are fully grown and which are in the proper stage of vegitation to produce the best f[l]ax are not longer essencial to the preservation or support of the root. the river somewhat wider than yesterday and the mountains more distant from the river and not so high; the bottoms are but narrow and little or no timber near the river. some pine on the mountains which seems principally confined to their uper region. we killed one Elk this morning and found part of the flesh and the skin of a deer this evening which had been kiled and left by Cap^{t}. Clark. we saw several herds of the Bighorn but they were all out of our reach on inacessable clifts. we encamped on the Lar^{d}. side in a small grove of narro[w-]leafed cottonwood. there is not any of the broad leafed cottonwood on the river since it has entered the mountains. Capt Clark ascended the river on the Star^{d}. side. in the early part of the day after he left me the hills were so steep that he gained but little off us; in the evening he passed over a mountain by which means he cut off many miles of the river's circuitous rout; the Indian road which he pursued over this mountain is wide and appears as if it had been cut down or dug in many places. he passed two streams of water, the branches of Ordway's creek, on which he saw a number of beaver dams succeeding each other in close order and extending as far up those streams as he could discover them in their cou[r]se towards the mountains. he also saw many bighorn anamals on the clifts of the mountains. not far beyond the mountain which he passed in the evening he encamped on a small stream of runing water, having travelled about 20.M. the water of those rivulets which make down from these mountains is extreemly cold pure and fine. the soil near the river is of a good quality and produces a luxuriant growth of grass and weeds; among the last the sunflower holds a distinguished place. the aspin is small but grows very commonly on the river and small streams which make down from the Mou^{ns}.

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[1] General Henry Dearborn, for whom was named the fort (erected by his order, in 1804) which was the nucleus of the city of Chicago. This fort was destroyed by hostile Indians, Aug. 16, 1812; the post was reoccupied in June, 1816. See John Wentworth's "Fort Dearborn," in Chicago *Tribune*, May 22, 1881; reprinted in *Fergus Hist. Series*, No. 16 (Chicago, 1881). — Ed.

[2] Now Little Prickly-pear Creek. — Ed.

[3] This is *Linum perenne*; the ordinary cultivated flax is *L. usitatissimum*. — Ed.

Courses and distances of July 18.th 1805.

S. 15.° W.	1 ¼	to a Lar.d bend a high clift of the mountain on L.d S.d
West	1 ¼	to the entrance of Dearborn's river on Star.d
S. 45.° W.	2 ½	to a Star.d bend
S. 8.° E.	6 ½	to the center of a bend on Lar.d side, passing several small bends, a small creek at one mile on Lar.d and an island on Star.d near the extre.ty of course
S. 80.° W.	½	to a tree in the center of a Star.d bend
S. 20.° W.	1 ½	to the center of a Star.d bend passing an Island.
S. 70.° E.	¼	to a bluff in a Star.d bend.
S. 75.° W.	1 ½	to the center of a Star.d bend, passing a small creek at ½ M. on Star.d side.
S. 5.° W.	½	to the entrance of Ordway's Creek on the Star.d side in a Star.d bend 30 y.ds wide.
S. 30.° E.		to the center of a Lar.d bend. the vally widens
S. 40.° W.	¾	to the center of a Star.d bend.
S. 85.° E.	2.	to the center of a Lar.d bend, passing 3 short bends, where we encamped for the evening.
Miles.	21.	

Point of observation N· 33.

On the Lar.d shore two miles above the entrance of Dearborn's River, observed time and distance ☉'s and moon's nearest limbs with Sextant; ☉. East.

	Time			Distance				Time			Distance		
	h	m	s	°	′	″		h	m	s			
A.M.	7.	55.	50	102.	57.	30.	A.M.	8.	7.	12	102.	53.	.
	"	58.	33	"	57.	–.		"	8.	52	"	52.	30
	8.	00.	14	"	56.	30		"	10.	21	"	51.	30
	"	2.	20	"	54.	45		"	12.	47	"	51.	15
	"	5.	50	"	53.	45		"	13.	35	"	51.	15

I also observed another species of flax today which is not so large as the first, sildome attaining a greater hight then 9 Inches or a foot the stem and leaf resemble the other species but the stem is rarely branched, bearing a single monopetallous bellshaped blue flower which is suspended with it's limb downwards,[1]

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[1] *Campanula rotundifolia.* — Ed.

[Clark:] *July 18th Thursday 1805*

a fine morning passed a Considerable river which falls in on the Star^{d} Side and nearly as wide as the Missouri we call [it] Dearbournes river after the Set^{y} of war. we thought it prudent for a partey to go a head for fear our fireing Should allarm the Indians and cause them to leave the river and take to the mountains for safty from their enem[ie]s who visit them thro this rout. I deturmined to go a head with a Small partey a few days and find the Snake Indians if possible after brackfast I took J. Fields Potts & my Servent proceeded on. the Country So Hilley that we gained but little of the Canoes untill in the evening I passed over a mountain on an Indian rode by which rout I cut off Several Miles of the Meanderings of the river, the roade which passes this mountain is wide and appears to have been dug in maney places, we camped on a Small run of Clear cold water, musquitors verry troublesom the forepart of the evening I saw great maney Ibex. we crossed two Streams of running water on those streams ordway Creek I saw Several Beaver dams. the Countrey is mountanious & rockey except the Valey &c. which is covered with earth of a good quality without timber, The timber which is principally pitch pine is Confined to the mountains, the Small runs & Creeks which have water running in them Contain Cotton-Willow, Willow, *&* aspin. trees all Small. I Saw maney fine Springs & Streams of running water which Sink & rise alternately in the Valies the water of those Streams are fine, those streams which run off into the river are damed up by the beaver from near ther mouthes up as high as I could See up them

[Lewis:] *Friday July 19th 1805.*

The Musquetoes are very troublesome to us as usual. this morning we set out early and proceeded on very well tho' the water appears to encrease in volocity as we advance. the current has been strong all day and obstructed with some rapids, tho' these are but little broken by rocks and are perfectly safe. the river deep and from 100 to 150 y^{ds} wide. I walked along shore today and killed an Antelope. wh[en]ever we get a view of the lofty summits of the mountains the snow presents itself, altho' we are almost suffocated in this confined vally with heat. the pine cedar and balsum fir grow on the mountains in irregular assemb[l]ages or spots mostly high up on their sides and summits. this evening we entered much the most remarkable clifts that we have yet seen. these clifts rise from the waters edge on either side perpendicularly to the hight of (*about*) 1200 feet. every object here wears a dark and gloomy aspect. the tow[er]ing and projecting rocks in many places seem ready to tumble on us. the river appears to have forced it's way through this immence body of solid rock for the distance of 5¾ Miles and where it makes it's exit below has th[r]own on either side vast collumns of rocks mountains high. the river appears to have woarn a passage just the width of it's channel or 150 y^{ds}. it is deep from side to side nor is ther in the 1st 3 Miles of this distance a spot except one of a few yards in extent on which a man could rest the soal of his foot. several fine springs burst out at the waters edge from the interstices of the rocks. it happens fortunately that altho' the current is strong it is not so much so but what it may be overcome with the oars for there is hear no possibility of using either the cord or Setting pole. it was late in the evening before I entered this place and was obliged to continue my rout untill sometime after dark before I found a place sufficiently large to encamp my small party; at length such an one occurred on the lar^{d} side where we found plenty of lightwood and pi[t]ch pine. this rock is a black grannite below and appears to be of a much lighter colour above and from the fragments I take it to be flint of a yellowish brown and light creemcoloured yellow. from the singular appearance of this place I called it the *gates of the rocky mounatains.*[1] the mountains higher today than yesterday, saw some Bighorns and a few Antelopes also beaver and Otter; the latter are now very plenty one of the men killed one of them today with a setting pole. musquetoes less troublesome than usual. we had a thundershower today about 1.P.M. which continued about an hour and was attended with some hail. we have seen no buffaloe since we entered the mounts. this morning early Capt. Clark pursued his rout, saw early in the day the remains of several Indians camps formed of willow brush which appeared to have been inhabited some time this spring. saw where the natives had pealed the bark off the pine trees about the same season. this the indian woman with us informs that they do to obtain the sap and soft part of the wood and bark for food. at 11.A.M. Capt. C. feell in with a gang of Elk of which he killed 2. and not being able to obtain as much wood as would make a fire substituded the dung of the buffaloe[1] and cooked a part of their meat on which they breakfasted and again pursued their rout, which lay along an old indian road. this evening they passed a hansome valley watered by a large creek which extends itself with it's valley into the mountain to a considerable distance. the latter part of the evening their rout lay over a hilly and mountanous country covered with the sharp fragments of flint which cut and bruised their feet excessively; nor wer the prickly pear of the leveler part of the rout much less painfull; they have now become so abundant in the open uplands that it is impossible to avoid them and their thorns are so keen and stif that they pearce a double thickness of dressed deers skin with ease. Capt. C. informed me that he extracted 17 of these bryers from his feet this evening after he encamped by the light of the fire. I have guarded or reather fortifyed my feet against them by soaling my mockersons with the hide of the buffaloe in parchment [*i.e.*, hard-dried]. he encamped on the river much fortiegud having passed two mountains in the course of the day and travelled about 30 Miles.

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[1] At the entrance to the Gate of the Mountains is a curious elevation, now called the Bear's Teeth, from several peaks of rock which form a fanciful resemblance to those articles. —ED.

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[1] This was the common fuel of the treeless regions before the buffalo disappeared. The pieces of dried dung were called buffalo-chips or sometimes "bodewash" — the latter a corruption of the French term *bois de vache*. — Ed.

Courses and distances of the 19th July 1805.

South	¼	to a pine tree on the Stard. side in a bend
S. 85. E.	2.	to the center of a Lard. bend
S. 38. W.	1.	to a pine in the Stard. bend
South	1 ½	to the center of a stard. bend
N. 10° W.	2 ½	to the center of a Lard. bend
S. 30° E.	1 ¼	to the center of a Stard. bend
S. 25° E.	4 ½	to the center of a Lard. bend
S. 28° W.	1.	to the center of a Stard. bend passing 2 small islands near the commencement of this course
S. 60° E.	1 ¼	to the center of a Stard. bend
N. 70° E.	1 ½	to the entrance of a small creek in a Lard. bend, passing an island near the Stard. side.
S. 25° E.	1 ½	to a point of rocks in a bend on the Stard. side; those rocks put in close to the river on both sides, are perpendicular and about 1200 feet high, this place has so singular an appearance that I call it the gates of the rocky mountains. the water appears to have forced it's way through this immence body of solid rock, and thrown on either side below collumns of rock mountains high.
S. 55. E.	¼	to the center of a bend in the gates.
S. 10. W.	3 ½	to a bend on Lard. side passing a small island in the middle of the river at 1½ miles. a little short of the extremity of this course we encamped on the Lard. side.
Miles	22.	

[Clark:]

July 19th Fryday 1805

a fine morning I proceeded on in an Indian Parth river verry Crooked passed over two mountains Saw Several Indians Camps which they have left this Spring. Saw trees Peeled & found poles &c. at 11 oC. I saw a gange of Elk, as we had no provision Concluded to kill Some. Killd. two and dined being oblige[d] to substitute dry buffalow dung in place of wood, this evening passed over a Cream Coloured flint which [has] roled down from the Clifts into the bottoms, the Clifts Contain flint a dark grey Stone & a redish brown intermixed and no one Clift is solid rock, all the rocks of everry description is in Small pi[e]ces, appears to have been broken by Some Convulsion passed a butifull Creek on the St^d Side this even[in]g which meanders thro' a butifull Vallie of great extent, I call after Sg^t Pryor.[1] the countrey on the Lar^d Side a high mountain Saw Several Small rapids to day the river keep[s] its width and appear[s] to be deep, my feet is verry much brused & cut walking over the flint, & constantly stuck full [of] Prickley pear thorns, I puled out 17 by the light of the fire to night We camped on the river Same (Lar^d) Side Musqutors verry troublesom.

[Lewis:] *Saturday 20th 1805*

Set out early this morning as usual; currant strong, we therefore employ the toe rope when ever the banks permit the use of it; the water is reather deep for the seting pole in most places. at 6. A.M. the hills retreated from the river and the valley became wider than we have seen it since we entered the mountains. some scattering timber on the river and in the valley. consisting of the narrowleafed Cottonwood aspin & pine. vas[t] numbers of the several species of currants goosberries and service berries; of each of these I preserved some seeds. I found a black currant which I thought preferable in flavor to the yellow. this currant is really a charming fruit and I am confident would be prefered at our markets to any currant now cultivated in the U. States. we killed an Elk this morning which was very acceptable to us. through the valley which we entered early in the morning a large creek flows from the mountains and discharges itself into the river behind an island on Star^d side about 15 y^{ds} wide this we called Pott's Creek[2] after John Potts one of our party. about

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[1] A careful study of Clark's map of 1814 and other maps, Gass's *Journal*, and the Lewis and Clark journals, together with some knowledge of the "lay of the land," convinces me that Prickly Pear Creek is none other than the "Pryor's Creek" of Lewis and Clark. Prickly Pear Creek heads directly opposite the sources of Little Prickly Pear Creek, in the vicinity of Marysville, Montana, and just north of Helena. In its relation to the river and to the cañon just below its mouth, it is precisely a duplicate of Potts's Creek at Hilger's and the Gate of the Mountains. — O. D. WHEELER.

[2] Coues identified this with Big Prickly Pear Creek, but that is farther along. At a mile from the Gate of the Mountains is Hilger's ranch; just below the house built

10 A.M. we saw the smoke arrise as if the country had been set on fire up the valley of this creek about 7 Mi. distant we were at a loss to determine whether it had been set on fire by the natives as a signall among themselves on discovering us, as is their custom or whether it had been set on fire by Capt. C. and party accedentally. the first however proved to be the fact, they had unperceived by us discovered Capt. Clark's party or mine, and had set the plain on fire to allarm the more distant natives (*heard a gun from Capt C's party & fled quite over the mountains, thinking it their enemies Blackfoots.*) and fled themselves further into the interior of the mountains. this evening we found the skin of an Elk and part of the flesh of the anamal which Capt. C. had left near the river at the upper side of the valley where he assended the mountain with a note informing me of his transactions (*progressions*) and that he should pass the mounts which lay just above us and wate our arrival at some convenient place on the river. the other elk which Capt. C. had killed we could not find. about 2. in the evening we had passed through a range of low mountains and the country bacame more open again, tho' still broken and untimbered and the bottoms not very extensive. we encamped on the Lard. side near a spring on a high bank[1] the prickly pears are so abundant that we could scarcely find room to lye. just above our camp the river is again closed in by the Moun. on both sides. I saw a black woodpecker (or crow) today about the size of the lark woodpecker as black as a crow. I indevoured to get a shoot at it but could not. it is a distinct species of woodpecker; it has a long tail and flys a good deel like the jay bird.[2]

This morning Capt. Clark set out early and proceeded on through a valley leaving the river about six miles to his left; he fell in with an old Indian road which he pursued untill it

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thereon, a magnificent spring bursts from the ground and pours forth an enormous quantity of water that, as it flows into the Missouri, is a large stream, as Lewis and Clark state. It is, however, not more than a quarter of a mile long; and the explorers were misled by its appearance at the river. It is this stream which they named Potts's Creek. — O. D. WHEELER.

[1] Near El Dorado, about twelve miles northeast of Helena. — ED.

[2] Afterward named "Lewis's woodpecker," in honor of the explorer — known to scientists as *Asyndesmus torquatus*. — ED.

struck the river about 18 miles from his camp of the last evening just above the entrance of a large creek which we call white paint Creek. the party were so much fortiegued with their march and their feet cut with the flint and perced with the prickly pears untill they become so painfull that he proceeded but little further before he determined to encamp on the river and wait my arrival. Cap^{t} C. saw a smoke today up the valley of Pryor's creek which was no doubt caused by the natives likewise. he left signals or signs (*clothes paper, tape linen*) on his rout in order to inform the indians should they pursue his trale that we were not their enemies, but *white men* and their friends.

The Courses and distances July 20th 1805.

S. 40° W.	½	to a high rock in a Lar^{d} bend in the gates. here the high and perpendicular rocks cease and the Valley widens sudonly to more than it's usual extent since we have entered the Mountains.
S. 55° W.	1	to the center of a Star^{d} bend at which place a large creek falls in behind some islands on the Star^{d} side. the Indians set the plains on fire up this Creek. call it Pott's Creek.
S. 64° E.	2 ½	to the center of a Lar^{d} bend, passing two islands
S. 15° E.	¼	to the center of a Star^{d} bend. saw a number of the read head ducks; also several sand hill Crains.
East.	1 ½	to the center of a Lar^{d} bend, passing 2 small islands on Lar^{d} side.
S. 12° E.	1 ½	to the center of a Star^{d} bend passing a small Creek on Lar^{d} side at ¾ of a mile.
S. 50° E.	1 ¼	to the center of a Lar^{d} bend
S. 20° E.	2 ½	to the center of a Star^{d} bend.
S. 65° E.	2.	to a point in a Star^{d} bend, passing 3 small islands near Lar^{d} at 1. Mile.
N. 75° E.	2.	to the center of a Lar^{d} bend passing an island near the extremity of the course and encamped on Lar^{d} side at a spring.—
Miles.	15.	

Point of Observati[on] N^{o} [34]

On the Star^{d} shore at the extremity of the third course of this day, observed time and distance of ⊙'s and ☽'s nearest limbs with Sextant ⊙ East.

	Time h	m	s	Distance °	′	″
A.M.	10.	22.	16	76.	38.	–.
	".	24.	38	".	36.	45.

	Time. h	m	s	Distance. °	′	″		Time. h	m	s	Distance. °	′	″
A.M.	10.	35.	38	76.	26.	30.	A.M.	10.	38.	13	76.	25.	–.
	".	37.	3	".	25.	45.		".	39.	34	".	24.	45

Having lost my post Meridian Observations for Eql. Altitudes in consequence of a cloud which obscured the sun for several minutes about that time, I had recourse to two altitudes of the sun with Sextant.

Point of observation N° 35.

On Star^{d} shore five miles short of the encampment of this evening observed 2 Alt^{ds} of ☉'s L.L.

	Time h	m	s	Altitudes. °	′	″
P.M.	3.	10.	39	98.	48.	15
	4.	49.	34	66°.	17.	45.

[Clark:] *July 20th Satturday 1805*

a fine Morning we proceded on thro' a valley leaveing the river about 6 miles to our left and fell into an Indian roade which took us to the river above the mo. of a Creek 18 Miles The Misquetors verry troublesom my man York nearly tired out, the bottoms of my feet blistered. I observe a Smoke rise to our right up the Valley of the last Creek about 12 miles distant, The Cause of this Smoke I can't account for certainly tho' think it probable that the Indians have heard the Shooting of the Partey below and Set the Praries or Valey on fire to allarm their Camps; Supposeing our party to be a war party comeing against them, I left Signs to Shew the Indians if they should come on our trail that we were not their enemeys. Camped on the river, the feet of the men with me So Stuck with Prickley pear & cut with the Stones that they were Scerseley able to march at a Slow gate this after noon

[Lewis:] *Sunday July 21st 1805.*

Set out early this morning and passed a bad rappid where the river enters the mountain about 1.M. from our camp of last evening the Clifts high and covered with fragments of broken rocks. the current strong; we employed the toe rope principally; and also the poles as the river is not now so deep but reather wider and much more rapid our progress was therefore slow and laborious. we saw three swans this morning, which like the geese have not yet recovered the feathers of the wing and could not fly we killed two of them the third escaped by diving and passed down with the current; they had no young ones with them therefore presume they do not breed in this country these are the first we have seen on the river for a great distance. we daily see great numbers of gees with their young which are perfectly feathered except the wings which are deficient in both young and old. My dog caught several today, as he frequently dose. the young ones are very fine, but the old gees are poor and unfit for uce. saw several of the large brown or sandhill Crain today with their young. the young Crain is as large as a turkey and cannot fly they are of a bright red bey colour or that of the common deer at this season. this bird feeds on grass prinsipally and is found in the river bottoms. the grass near the river is lofty and green that of the hill sides and high open grounds is perfectly dry and appears to be scorched by the heat of the sun. the country was rough mountainous & much as that of yesterday untill towards evening when the river entered a beautifull and extensive plain country of about 10 or 12 miles wide which extended upwards further that the eye could reach this valley is bounded by two nearly parallel ranges of high mountains which have their summits partially covered with snow. below the snowey region pine succeeds and reaches down their sides in some parts to the plain but much the greater portion of their surfaces is uncovered with timber and expose either a barren sterile soil covered with dry parched grass or black and rugged rocks. the river immediately on entering this valley assumes a different aspect and character, it spreads to a mile and upwards in width, crouded with Islands, some of them large; is shallow enough for the use of the seting pole in almost every part and still more rappid than before; it's bottom is smooth stones and some large rocks as it has been since we have entered the mountains. the grass in these extensive bottoms is green and fine, about 18 inches or 2 feet high. the land is a black rich loam and appears very fertile. we encamped in this beatifull valley on the Lar^{d} side[1] the party complain of being much fatiegued with this days travel. we killed one deer today.

This morning we passed a bold creek 28 y^{ds} wide which falls in on Star^{d} side. it has a handsome and an extensive valley. this we called Pryor's Creek after Serg^{t} John[2] Pryor one of our party. I also saw two fesants (*Phesants*)[3] today of a dark brown colour much larger than the phesant of the U'States.

this morning Capt. Clark having determined to hunt and wait my arrival somewhere about his prese[n]t station was fearfull that some indians might still be on the river above him sufficiently near to hear the report of his guns and therefore proceeded up the river about three miles and [not] finding any indians nor discovering any fresh appearance of them returned about four miles below and fixed his camp near the river; after refreshing themselves with a few hours rest they set out in different directions to hunt. Capt C. killed a buck and Fields a buck and doe. he caught a young curlooe which was nearly feathered. the musquetoes were equally as troublesome to them as to ourselves this evening; tho' some hours after dark the air becomes so cold that these insects disappear. the men are all fortunately supplyed with musquetoe biers (*made of duck or gauze, like a trunk to get under*) otherwise it would be impossible for them to exist under the fatiegues which they daily encounter without their natural rest which they could not obtain for those tormenting insects if divested of their biers. timber still extreemly scant on the river but there is more in this valley than we have seen since we entered the mountains; the creeks which fall into the river are better supplyed with this article than the river itself.

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[1] Practically the site of Cañon Ferry, Mont. — Ed.

Just before entering this valley, they passed a spot known as Canyon Ferry. At this point the river is narrow, and hemmed in by walls of black rock; and here in recent years have been constructed a dam and power-house, from which electric power is transmitted to the cities of Helena and Butte. The dam is thirty feet high, and the ten dynamos furnish an aggregate of 12,000 horse-power. — O. D. Wheeler.

[2] His name was Nathaniel. The stream is now called Mitchell's Creek. — Ed.

[3] Identified as the dusky grouse (*Dendragapus obscurus richardsoni*). — Ed.

Courses and distances July 21st 1805.

S. 5° W.	½	to a Lar^d point opposite an Island
S. 30° E.	1.	to the center of a Lar^d bend, the hills now become low and the country opens on either side.
S. 25° W.	3.	to the center of a Star^d bend passing a large island on Lar^d side at one mile.
S. 80° E.	.3½	to a point in the Star^d bend passing a large creek 28 Y^{ds} wide on Star^d side at 2½ Miles *Pryor's Creek.* 15 y.^{ds} wide.
N. 40° E.	1.	to the center of a Lar^d bend.
S. 65° E.	3.	to the center of a Star^d bend
S. 60° E.	3 ½	to the center of a Star^d bend throughout this course the river is divided by a number of islands near the Star^d side, on the Lar^d wide bottoms. encamped on Lar^d in the bottom.
Miles	15 ½	

Point of Observation N^o 36.

On the Lar^d side of the Missouri ½ a mile above the extremity of the 2^{ed} course of this day observed time and distance of ⊙'s and ☽'s nearest limbs with Sextant ⊙ East.

	Time h m s	Distance ° ' "		Time h m s	Distance ° ' "
A.M.	8. 35. 31	63. 54. 30.	A.M.	8. 41. 36	63. 50. 15.
	". 36. 44	". 54. –.		". 43. 31	". 50. –.
	". 38. 20	". 52. 30.		". 44. 49	". 49. 45
	". 40. 24	". 51. 15.		". 46. 10	". 49. 15.

Also Observed Equal altitudes of ⊙ with Sextant.

	h m s		h m s	
A.M.	8. 50. 44	P.M.	4. 21. 1.	Altitude at the time of observation.
	". 52. 17		". 22. 18	° ' "
	". 53. 52.		". 24. 7.	75. 29. 3.

Point of Observation No. 37.

On the Lard. side of the river at the extremity of the fourth course of

this day; observed Meridian Altitude of ⊙'s L.L. with Octant by back observation	° 57.	′ 14.	″ –.
Latitude deduced from this observation.	° 46.	′ 10.	″ 32.9

We saw a number of trout today since the river has become more shallow; also caught a fish of a white colour on the belly and sides and of a bluish cast on the back which had been accedentally wounded by a setting pole. it had a long pointed mouth which opened somewhat like the shad.[1]

[Clark:] *July 21st. Sunday 1805*

a fine morning our feet So brused and cut that I deturmined to delay for the Canoes, & if possible kill Some meet by the time they arrived, all the Creeks which fall into the Missouri on the Std. Side Since entering the Mountains have extencive valies of open Plain, the river bottoms contain nothing larger than a Srub untill above the last Creek, the Creeks & runs have timber on them generally, the hills or mountains are in Some places thickly covered with pine & Cedar &c. &c. I proceeded on about 3 miles this morning finding no fresh Indian Sign returned down the river four miles and Camped, turned out to hunt for Some meat, which if we are Suck[c]essfull will be a Seasonable Supply for the partey assending, emence quantities of Sarvice buries, yellow, red, Purple & black currents ripe and Superior to any I ever tasted particularly the yellow & purple kind. Choke Cheries are Plenty; Some Gooseburies. The wild rose Continue, the Willow more abundant no cotton wood of the common kind. Small birds are plenty. Some Deer, Elk, Goats, and Ibex; no buffalow in the Mountains. Those mountains are high and a great perportion of them rocky: Vallies firtile I observe on the highest pinecals of some of the Mountains to the West Snow lying in Spots Some Still further North are covered with Snow and cant be Seen from this point

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[1] This fish is *Hyodon alosoides*. — Ed.

The Winds in those mountains are not settled, generally with the river, to day the wind blow hard from the West at the Camp. The Missouri Continus its width the Current Strong and crouded with little Islands and Co[ar]se graveley bars, but little fine Sand: The Chanel generally a Corse gravel or Soft mud. Musquetors & Knats verry troublesom. I killed a Buck, and J. Fields killed a Buck and Doe this evening. Cought a young Curlough.

[Lewis:] *Monday July 22nd 1805.*

We set out early as usual. The river being divided into such a number of channels by both large and small Island[s] that I found it impossible to lay it down correctly following one channel only in a canoe and therefore walked on shore took the general courses of the river and from the rising grounds took a view of the Islands and it's different channels which I laid do[w]n in conformity thereto on my chart. there being but little timber to obstruct my view I could see it's various meanders very satisfactorily. I passed through a large Island which I found a beautifull level and fertile plain about 10 feet above the surface of the water and never overflown. on this Island I met with great quantities of a smal onion[1] about the size of a musquit ball and some even larger; they were white crisp and well flavored I geathered about half a bushel of them before the canoes arrived. I halted the party for breakfast and the men also geathered considerable quantities of those onions. it's seed had just arrived to maturity and I gathered a good quantity of it. this appears to be a valuable plant inasmuch as it produces a large quantity to the squar foot and bears with ease the rigor of this climate, and withall I think it as pleasantly flavored as any species of that root I ever tasted. I called this beatifull and fertile island after this plant Onion Island. here I passed over to the Stard shore where the country was higher and ascended the river to the entrance of a large creek which discharges itself into the Missouri on the Stard side. it is composed of three pretty considerable creeks which unite in a beautifull and extensive vally a few miles before it discharges itself into the river. while wateing for the canoes to arrive I kiled an otter which sunk to the bottom on being shot, a circumstance unusual with that anamal. the water was about 8 feet deep yet so clear that I could see it at the bottom; I swam in and obtained it by diving. I halted the party here for dinner; the canoes had taken different channels through these islands and it was sometime before they all came up. I placed my thermometer in a good shade as was my custom about 4. P. M. and after dinner set out without it and had proceeded near a mile before I recollected it I sent Serg^t. Ordway back for it, he found it and brought it on. the murcury stood at 80 a.o this is the warmest day except one which we have experienced this summer. The Indian woman recognizes the country and assures us that this is the river on which her relations live, and that the three forks are at no great distance. this peice of information has cheered the sperits of the party who now begin to console themselves with the anticipation of shortly seeing the head of the missouri yet unknown to the civilized world. the large creek which we passed on Star^d. 15 y^{ds}. we call White Earth Creek[1] from the circumstance of the natives procuring a white paint on this crek. Saw many gees, crains, and small birds common to the plains, also a few phesants and a species of small curlooe or plover of a brown colour which I first met with near the entrance of Smith's river but they are so shy and watchfull there is no possibility of geting a shoot at them it is a different kind from any heretofore discribed and is about the size of the yellow leged plover or jack Curlooe.[2] both species of the willow that of the broad leaf and narrow leaf still continue, the sweet willow is very scarce. the rose bush, small honesuckle, the pulpy leafed thorn, southernwood, sage Box alder narrow leafed cottonwood, red w[o]od, a species of sumac are all found in abundance as well as the red and black goosberries, service berries, choke cherries and the currants of four distinct colours of black, yellow, red and perple. the cherries are not yet ripe. the bear appear to feed much on the currants. late this evening we arrived at Capt. C[l]arks camp on the stard. side of the river; we took them on board with the meat they had collected and proceeded a short distance and encamped on an Island Capt. Clark's party had killed a deer and an Elk today and ourselves one deer and an Antelope only. altho' Capt C. was much fatiegued his feet yet blistered and soar he insisted (*determined*) on pursuing his rout in the morning nor weould he consent willingly to my releiving him at that time by taking a tour of the same kind. finding him anxious I readily consented to remain with the canoes, he ordered Frazier and Jo. & Reubin Fi[e]lds to hold themselves in readiness to accompany him in the morning. Sharbono was anxious to accompany him and was accordingly permitted. the musquetoes and knats more than usually troublesome to us this evening.

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[1] *Allium cernuum.* — Ed.

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[1] Now Beaver Creek; at the forks is a town called Placer, on the road from Gallatin City to Helena. — Ed.

[2] Either Bartram's sandpiper (*Bartramia longicauda*), or the mountain plover (*Podasocys montanus*). — Ed.

Cou[r]ses and distances of July 22nd 1805.

N. 75° E.	2¼	to a Lard. bend 1 M. above a large Island
S. 34° E.	3.	to the center of a Stard. bend at the upper point of Onion Island.
S. 80° E.	1½	to a Stard. bend passing several Islands.
N. 45° E.	1.	to a Lard. bend passing several Islands
S. 25° E.	6.	passing four long circular bends and severral large islands to a point of the bluff on Stard. side; a large creek well timbered falls in on Stard. side ¾ of a mile below the extremity of this course. whiteearth C.
S. 12° E.	6.	to a bluff point on the Stard. side; this course and distance forms the cord line to a general circular bend of the river, which is formed of 4 other bends, and from the center of which, a line drawn N. 70° E. 3 miles will intersect the center of the general bend of the river 4 miles short of the extremity of this course by water we encamped on an Isld.
Miles	19¾	

[Clark:] *July 22nd Monday 1805*

a fine morning wind from the S.E. the last night verry cold, my blanket being Small I lay on the grass & covered with it. I opened the bruses & blisters of my feet which caused them to be painfull dispatched all the men to hunt in the bottom for Deer, deturmined my Self to lay by & nurs my feet. haveing nothing to eat but Venison and Currents, I find my Self much weaker than when I left the Canoes and more inclined to rest & repose to day. These men were not Suckcessfull in hunting killed only one Deer Cap^t Lewis & the Party arv^d at 4 oClock & we all proceeded on a Short distance and Camped on an Island, the Musquitors verry troublesom this evening G Drewyer not knowing the place we camped Continued on up the river. I deturmined to proceed on in pursute of the Snake Indians on tomorrow and directed Jo[and]Ruben Fields [and] Frasure to get ready to accompany me. Shabono, our interpreter requested to go, which was granted &c. In my absence the hunters had killed Some Deer & a Elk, one fusee found &c. &c.

[Lewis:] *Tuesday July 23rd 1805.*

Set out early as usual; Cap^t Clark left us with his little party of 4 men and continued his rout on the Star^d side of the river. about 10'OC^k A.M. we came up with Drewyer who had seperated from us yesterday evening and lay out all night not being able to find where we had encamped. he had killed 5 deer which we took on board and continued our rout. the river is still divided by a great number of islands, it[s] channels sometimes seperating to the distance of 3 miles; the current very rapid with a number of riffles; the bed gravel and smooth stones; the banks low and of rich loam in the bottoms; some low bluffs of yellow and red clay with a hard red slate stone intermixed. the bottoms are wide and but scantily timbered; the underbrush very thick consisting of the narrow & broad leafed willow rose and Currant bushes principally. high plains succeed the river bottoms and extend back on either side to the base of the mountains which are from 8 to 12 miles asunder, high, rocky, some small pine and Cedar on them and ly parallel with the river. passed a large creek on Lar^d side

20 yds. wide which after meandering through a beautifull and extensive bottom for several miles nearly parallel with the river discharges itself opposite to a large cluster of islands which from their number I called the 10 islands and the creek Whitehous's Creek, after Josph Whitehouse one of the party.[1] saw a great abundance of the common thistle; also a number of the wild onions of which we collected a further supply. there is a species of garlic also which grows on the high lands with a flat leaf now green and in blos. but is strong tough and disagreeable. found some seed of the wild flax ripe which I preserved; this plant grows in great abundance in these bottoms. I halted rearther early for dinner today than usual in order to dry some articles which had gotten wet in several of the canoes. I ordered the canoes to hoist their small flags in order that should the indians see us they might discover that we were not Indians, nor their enemies. we made great uce of our seting poles and cords the uce of both which the river and banks favored. most of our small sockets were lost, and the stones were so smooth that the points of their poles sliped in such manner that it increased the labour of navigating the canoes very considerably, I recollected a parsel of giggs which I had brought on, and made the men each atatch one of these to the lower ends of their poles with strong wire, which answered the desired purpose. we saw Antelopes Crain gees ducks beaver and Otter. we took up four deer which Capt. Clark & party had killed and left near the river. he pursued his rout untill late in the evening and encamped on the bank of the river 25 Ms. above our encampment of the last evening; he followed an old indian road which lyes along the river on the stard. side. Capt. [Clark] saw a number of Antelopes, and one herd of Elk. also much sign of the indians but all of ancient date. I saw the bull rush and Cattail flag today.

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[1] This was either the present Confederate Creek or Duck Creek — the two flowing into the Missouri almost together. On the former stream, a few miles above its mouth, was located (1865) the rich gold-bearing Confederate Gulch, and the mining town of Diamond City. It is said to have been discovered by some Confederate soldiers of Price's army, who in 1861 fled up the Missouri River. — O. D. WHEELER.

Courses and distances of July 23rd 1805.

S. 20° E.	2.	to a point of the Star^{d} bluff. passing several isl^{ds}.
N. 60° E.	1 ½	to a lar^{d} bend. passing a large island on star^{d}
S. 30° E.	1 ½	to a star^{d} bend passing the upper point of the island at ½ a mile and two other small ones on it's lower end. a large creek falls in on Lar^{d} behind 20 y^{ds} wide call it Whitehouse's Creek.
S. 70° E.	1 ¾	to a Lar^{d} bend passing several outlets to the river on Star^{d} and through an assemblage of islands
S. 5° E.	1 ½	to the lower point of an island. the river 300 y^{ds} wide at this place.
S. 20° E.	2.	to the center of a Lar^{d} bend passing the upper p^{t} of the island on Star^{d} at 1 ¼ M. and a small isl^{d} on Lar^{d} near the extremity of this course.
S. 10° W.	1 ½	to the center of a Star^{d} bend
S. 80° E.	1.	to a point in the Star^{d} bend.
N. 85° E.	3.	to a tree in a Lar^{d} bend passing two small isl^{ds}
S. 20° W.	3.	to a Stard bend passing over a large island; called it *broad Island.*
N. 70° E.	1 ½	to a point of high timber on Star^{d} side.
S. 20° W.	2.	to some dead timber in the center of a Star^{d} bend just above which we encamped on an island on Lar^{d} opposite to a large isl^{d} on Star^{d} [1]
Miles	22 ¼	

I saw a black snake today about two feet long the belly of which was as black as any other part or as jet itself. it had 128 scuta on the belley 63 on the tail.[2]

[Clark:] *July 23rd Tuesday 1805*

a fair morning wind from the South I Set out by land at 6 miles overtook G. Drewyer who had killed a Deer. we killed in the Same bottom 4 deer & a antilope & left them on the river bank for the Canoes proceeded on an Indian roade through a wide Vallie which the Missouri Passes about 25 miles & camped on the bank of the river, High mountains on either Side of the Vallie Containing Scattering Pine & Cedar, Some Small Cotton-willow Willow &c. on the Islands & bank of the river I saw no fresh Sign of Indians to day Great number of antelopes Some Deer & a large Gangue of Elk

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[1] This encampment was below Bedford, Mont.; but apparently Clark spent the night near Townsend, not far from the mouth of Deep Creek. — ED.

[2] The dark variety of the so-called spreading adder or blowing viper — a species of *Heterodon*. — COUES (*L. and C.* iii, p. 435).

[Lewis:] *Wednesday July 24th 1805.*

Set out at sunrise; the current very strong; passed a remarkable bluff of a crimson coloured earth[1] on Stard intermixed with Stratas of black and brick red slate. the valley through which the river passed today is much as that of yesterday nor is there any difference in the appearance of the mountains, they still continue high and seem to rise in some places like an amphetheater one rang[e] above another as they receede from the river untill the most distant and lofty have their tops clad with snow. the adjacent mountains commonly rise so high as to conceal the more distant and lofty mountains from our view. I fear every day that we shall meet with some considerable falls or obstruction in the river notwithstanding the information of the Indian woman to the contrary who assures us that the river continues much as we see it. I can scarcely form an idea of a river runing to great extent through such a rough mountainous country without having it's stream intersepted by some difficult and dangerous rappids or falls. we daily pass a great number of small rappids or riffles which decend one t[w]o or 3 feet in 150 yards but we are rarely incommoded with fixed or standing rocks and altho' strong rappid water [they] are nevertheless quite practicable & by no means dangerous. we saw many beaver and some otter today; the former dam up the small channels of the river between the islands and compell the river in these parts to make other channels; which as soon as it has effected that which was stoped by the beaver becomes dry and is filled up with mud sand gravel and driftwood. the beaver is then compelled to seek another spot for his habitation wher[e] he again erects his dam. thus the river in many places among the clusters of islands is constantly changing the direction of such sluices as the beaver are capable of stoping or of 20 y^{ds}. in width. this anamal in that way I beleive to be very instrumental in adding to the number of islands with which we find the river crouded. we killed one deer today and found a goat or Antelope which had been left by Cap^{t}. Clark. we saw a large bear but could not get a shoot at him. we also saw a great number of Crains & Antelopes, some gees and a few red-headed ducks. the small birds of the plains and curloos still abundant. we observed a great number of snakes about the water of a brown uniform colour, some black, and others speckled on the abdomen and striped with black and brownish yellow on the back and sides. the first of these is the largest being about 4 feet long, the second is of that kind mentioned yesterday, and the last is much like the garter snake of our country and about it's size.[1] none of these species are poisonous I examined their teeth and f[o]und them innocent. they all appear to be fond of the water, to which they fly for shelter immediately on being pursued. we saw much sign of Elk but met with none of them. from the appearance of bones and excrement of old date the buffaloe sometimes straggle into this valley; but there is no fresh sighn of them and I begin [to] think that our harvest of white puddings is at an end, at least untill our return to the buffaloe country. our trio of pests still invade and obstruct us on all occasions, these are the Musquetoes eye knats and prickley pears, equal to any three curses that ever poor Egypt laiboured under, except the *Mahometant yoke.* the men complain of being much fortiegued. their labour is excessively great. I occasionly encourage them by assisting in the labour of navigating the canoes, and have learned to *push a tolerable good pole* in their fraize [phrase]. This morning Cap^{t}. Clark set out early and pursued the Indian road which took him up a creek some miles abo[u]t 10.A.M. he discovered a horse about six miles distant on his left, he changed his rout towards the horse, on approaching him he found the horse in fine order but so wild he could not get within less than several hundred paces of him. he still saw much indian sign but none of recent date. from this horse he directed his course obliquely to the river where on his arrival he killed a deer and dined. in this wide valley where he met with the horse he passed five handsome streams, one of which only had timber another some willows and much stoped by the beaver. after dinner he continued his rout along the river upwards and encamped having traveled about 30 M^{ls}.

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[1] Which our squaw told us the natives use for paint. — GASS (p. 160).

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[1] The brown snake was probably *Pityophis sayi*: the last named is *Eutænia vagrans*, differing only in species from the Eastern garter-snake (*E. sirtalis*). — Ed.

Courses and distances of the 24th July 1805.

S. 40° E.	1.	to a Lar^d bend. passing between two large islands
S. 50° W.	½	to the center of a Star^d bend opposite to an Island
S. 15° E.	1 ½	to a point of high timber in a Lar^d bend. opposite to an island.
S. 40° W.	1 ¼	to the center of a Star^d bend low bluffs touching the river at this point, a small run [1] just below.
South	3 ½	to a bluff point in a Star^d bend passing a small island on Star^d and a bluff of crimson earth & slate.
S. 85° E.	½	to a Lar^d bend opposite to a large Island
S. 30° E.	1.	to a bluff point in a Star^d bend passing an Isl^d
East.	¾.	to a point in a Lar^d bend passing a small Isl^d
S. 30° E.	3.	to the lower point of a large island.
S. 85° E.	1 ½	to a tree in a lar^d bend. passing an assemblage of Is^{ds}
South.	½	to a tree on the Star^d shore opposite to the upper point of an island.
S. 80° E.	1.	to the center of a Lar^d bend passing the upper point of an Island on Lar^d
S. 10. W.	1 ½	to the center of a Star^d bend passing an Is^{ld} at ¾ of a mile
East.	2.	to the center of a Lar^d bend passing 2 small islands; encamped on Star^d a little short of this course.[2]
Miles	19 ½	

Point of Observation N^o 38.

On the Star^d side of the Missouri at the extremity of the 8th course of this day observed Equal Altitudes of the ⊙ with Sextant.

	h m s		h m s	
A.M.	9. 1. 37	P.M.	4. 6. 20	Altitude at the time of Observation
	". 3. 10		". 7. 53.	° ′ ″
	". 4. 45		". 9. 30.	79. 8. 15.

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[1] Indian Creek of to-day, just below Townsend, Mont., and exactly where the main line of the N. P. Railway crosses the Missouri. — O. D. WHEELER.

[2] This camp was above Greyson's Creek, probably near Dry Creek. — ED.

[Clark:] *July 24th Wednesday 1805*

a fine day wind from the NW. I proceeded on up a Creek on the derection of the Indian road at 10 oClock discovered a horse 6 miles to my left towards the river as I approached the horse found him fat and verry wild we could not get near him, we changed our Derection to the river for water haveing previously Crossed 5 handsom Streams in one Vallie one only had any timber on it one other Willows only & a number of beaver Dams. when I struck the river turned down to kill a Deer which we dined on & proceeded on up the river a fiew miles an[d] Campd on th[e] river. the river much like it was yesterday. the Mountains on either Side appear like the hills had fallen half down & turned Side upwards the bottoms narrow and no timber a fiew bushes only.[1]

[Lewis:] *Thursday July 25th 1805.*

Set out a an early hour and proceeded on tolerably well the water still strong and some riffles as yesterday. the country continues much the same as the two preceeding days. in the forenoon we saw a large brown bear on an island but he retreated immediately to the main shore and ran off before we could get in reach of him. they appear to be more shy here than on the Missouri below the mountains. we saw some antelopes of which we killed one. these anamals appear now to have collected again is [in] small herds several females with their young and one or two males compose the herd usually. some males are yet soletary or two perhaps together scattered over the plains which they seen[m] invariably to prefer to the woodlands. if they happen accedentaly in the woodlands and are allarmed they run immediately to the plains, seeming to plaise a just confidence in their superior fleetness and bottom. we killed a couple of young gees which are very abundant and fine; but as they are but small game to subsist a party on of our strength I have forbid the men shooting at them as it waists a considerable quantity of amunition and delays our progress. we passed Capt. Clark's encampment of the 23rd. inst. the face of the country, & anamal and vegetable productions were the same as yesterday, untill late in the evening, when the valley appeared to termineate and the river was again hemned in on both sides with high c[r]aiggy and rocky clifts. soon after entering these hills or low mountains we passed a number of fine bold springs[1] which burst out underneath the Lard. clifts near the edge of the water; they wer[e] very cold and freestone water. we passed a large Crk. today in the plain country, 25 yds. wide, which discharges itself on the Stard. side; it is composed of five streams which unite in the plain at no great distance from the river and have their sou[r]ces in the Mts. this stream we called Gass's Creek.[2] after Sergt. Patric Gass one of our party. two rapids near the large springs we passed this evening were the worst we have seen since that we passed on entering the rocky Mountain; they were obstructed with sharp pointed rocks, ranges of which extended quite across the river. the clifts are formed of a lighter coloured stone than those below I observed some limestone[s] also in the bed of the river which seem to have been brought down by the current as they are generally small and woarn smooth. This morning Capt. Clark set out early and at the distance of a few miles arrived at the three forks of the Missouri, here he found the plains recently birnt on the Stard. side, and the track of a horse appeared to have passed only about four or five days. after taking breakfast of some meat which they had brought with them, examined the rivers, and written me a note informing me of his intended rout, he continued on up the North fork, which though not larger than the middle fork, boar more to the West, and of course more in the direction we were anxious to pursue. he ascended this stream about 25 miles on Stard. side, and encamped, much fatiegued, his feet blistered and wounded with the prickley pear thorns. Charbono gave out, one of his ankles failed him and he was unable to proceede any further. I observed that the rocks which form the clifts on this part of the river appear as if they had been undermined by the river and by their weight had seperated from the parent hill and tumbled on their sides, the stratas of rock of which they are composed lying with their edges up; others not seperated seem obliquely depressed on the side next the river as if they had sunk down to fill the cavity which had been formed by the washing and wearing of the river. I have observed a red as well as a yellow species of goosberry which grows on the rocky Clifts in open places of a swe[e]tish pine like flavor, first observed in the neighbourhood of the falls; at least the yellow species was first observed there. the red differs from it in no particular except it's colour and size being somewhat larger; it is a very indifferent fruit, but as they form a variety of the native fruits of this country I preserved some of their seeds. musquetoes and knats troublesome as usual.

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[1] Clark here begins a consecutive record of "Courses [and distances] of the Missouri through the Rocky Mountains" and beyond to the head of Jefferson River, covering his journey from July 17 to August 17. This record (given in instalments on pp. 26, 27, 34–41, 46–49, 60–62, and 67 of Codex G) we have transferred to "Scientific Data," in vol. v. — Ed.

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[1] These form the Mammoth Spring of to-day. — O. D. WHEELER.

[2] Now called Hot (or Warm) Springs Creek. — ED.

Courses and distances of July 25th 1805.

S. 25° W.	1.	to the center of a Stard bend
S. 10° W.	1 ¼	to a point in a Stard bend passing a small Isld Lard Sd
S. 5° W.	3 ½	to a point in a Stard bend.
S. 40° E.	1 ¼	to a tree in the Stard bend passing a Lard pot at ½ M
N. 80° E.	2 ½	to the center of a Stard bend, passing a small island at ½ M. on Stard opposite or behi[n]d which a large Creek discharges itself on Stard 25 Yds wide which we call Gass's Creek.
South	3.	to the center of a Stard bend
S. 75° E.	1 ½	to a bluff point on Stard here the river again enters the mountains, I beleive it to be a second grand chain of the rocky Mots [1]
S. 55° E.	1.	to a point in a Lard bend at some large springs.
S. 30° E.	½	to a point in the Lard bend, high clifts.
South.	½	to a Clift of rocks in a Lard bend; oppt to which we
Miles.	16.	encamped for the night under a high bluff

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[1] The mountains nearest the river on the east are the Big Belt or Girdle Mountains. The southern end of this range, cut off by a gap from the main stretch, is the "second grand chain" here seen. — Ed.

[Clark:] *July 25th Thursday 1805*

a fine morning we proceeded on a fiew miles to the three forks of the Missouri those three forks are nearly of a Size, the North fork appears to have the most water and must be Considered as the one best calculated for us to assend Middle fork is quit[e] as large about 90 yds. wide. The South fork is about 70 yds wide & falls in about 400 yards below the midle fork those forks appear to be verry rapid & contain some timber in their bottoms which is verry extencive. on the North Side the Indians have latterly Set the Praries on fire, the Cause I can't account for. I saw one horse track going up the river, about four or 5 days past. after Brackfast (which we made on the ribs of a Buck killed yesterday), I wrote a note informing Capt Lewis the rout I intended to take, and proceeded on up the main North fork thro' a Vallie, the day verry hot, about 6 or 8 miles up the North fork a Small rapid river falls in on the Lard Side which affords a great Deel of water and appears to head in the Snow mountains to the SW. this little river falls into the Missouri by three mouthes, haveing Seperated after it arrives in the river Bottoms, and Contains as also all the water courses in this quarter emence number of Beaver & orter maney thousand enhabit the river & Creeks near the 3 forks (Pholosipher's River)[1] We Campd on the Same Side we assended Starboard 20 miles on a direct line up the N. fork. *Shabono* our Intrepreter nearly tired [out] one of his ankles falling him. The bottoms are extencive and tolerable land covered with tall grass & prickley pears. The hills & mountains are high Steep & rockey. The river verry much divided by Islands, Some Elk Bear & Deer and Some small timber on the Islands. Great quantities of Currents red, black, yellow, Purple, also Mountain Currents which grow on the Sides of Clifts, inferior in taste to the others haveing Sweet pineish flaver and are red & yellow, Choke Cheries, Boin roche, and the red buries also abound. Musquetors verry troublesom untill the Mountain breeze sprung up, which was a little after night.

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[1] Named by the explorers Philosophy River; but now known as Willow Creek; at its mouth is Willow City, on a spur of the Northern Pacific Railroad. — Ed.

[Lewis:] *Friday July 26th 1805.*

Set out early this morning as usual current strong with frequent riffles; employ the cord and seting poles, the oars scarcely ever being used except to pass the river in order to take advantage of the shore and current. at the distance of 3¾ M. passed the entrance of a large Creek 15 y^{ds} wide which discharges itself on Lar^{d} near the center of a Lar^{d} bend it is a bold runing stream this we called Howards' Creek[1] after Thomas P. Howard one of our party. at the distance of one mile further we passed the entrance of a small run which falls in just above a rocky clift on Lar^{d} here the hills or reather Mountains again recede from the river and the valley again widens to the extent of several miles with wide and fertile bottom lands. covered with grass and in many places a fine terf of greenswoard. the high lands are thin meagre soil covered with dry low sedge and a species of grass also dry the seeds of which are armed with a long twisted hard beard at the upper extremity while the lower point is a sharp subulate, firm point beset at it's base with little stiff bristles standing with their points in a contrary direction to the subulate point to which they answer as a barb and serve also to pres it forward when onece entered a small distance. these barbed seed penetrate our mockersons and leather legings and give us great pain untill they are removed. my poor dog suffers with them excessively, he is constantly binting and scratching himself as if in a rack of pain. the prickly pear also grow here as abundantly as usual. there is another species of the prickly pear of a globular form, composed of an assemblage of little conic leaves springing from a common root to which their small points are attached as a common center and the base of the cone forms the apex of the leaf which is garnished with a circular range of sharp thorns quite as stif and more keen than the more common species with the flat leaf, like the Cocheneel plant.[2] on entering this open valley I saw the snowclad tops of distant mountains before us. the timber and mountains much as heretofore. saw a number of beaver today and some otter, killed one of the former, also 4 deer; found a deer's skin which had been left by Capt. C. with a note informing me of his having met with a horse but had seen no fresh appearance of the Indians. the river in the valley is from 2 to 250 y^{ds} wide and crouded with Islands, in some places it is ¾ of a mile wide including islands. w[h]ere it passed the hills it was from 150 to 200 y^{ds} the banks are still low but never overflow. one of the men brought me an indian bow which he found, it was made of cedar and about 2 F. 9 Inh. in length. it had nothing remarkable in it's form being much such as is used by the Mandans Minetares &c. This morning Cap^{t} Clark left Sharbono and Joseph Fields at the camp of last evening and proceeded up the river about 12 miles to the top of a mountain from whence he had an extensive view of the valley of the river upwards and of a large creek which flowed into it on St^{d} side. not meeting with any fresh appearance of Indians he determined to return and examine the middle fork of the missouri and meet me by the time he expected me to arrive at the forks. he returned down the mountain by the way of an old Indian road which led through a deep hollow of the mountain facing the south the day being warm and the road unshaded by timber in the deep valley he suffered excessively with heat and the want of water, at length he arrived at a very cold spring, at which he took the precaution of weting his feet head and hands before [he] drank but notwithstanding this precaution he soon felt the effects of the water. he felt himself very unwell shortly after but continued his march rejoined Sharbono and Fields where the party eat of a fawn which Jo. Fields had killed in their absence Cap^{t} C. was so unwell that he had no inclination to eat. after a short respite he resumed his march pass[ed] the North fork at a large island; here Charbono was very near being swept away by the current and cannot swim, Capt. C however risqued him[self] and saved his life. Capt. C. continued his march to a small river which falls into the North fork some miles above the junction of the 3 forks it being the distance of about four miles from his camp of last evening here finding himself still more unwell he determined to encamp. they killed two brown or grisley bear this evening on the island where they passed the N. fork of the Missouri. this stream is much divided by islands and it's current rapid and much as that of the missouri (*Qu*) where we are and is navigable. emence q^{ty} of Beaver

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[1] Now called Green Creek, sometimes Sixteen-mile Creek. At its mouth is the village of Painted Rock. — Ed.

[2] A different genus from the common prickly pear (*Opuntia*); that here described appears to be *Mamillaria missouriensis*. — Ed.

Courses and distances of July 26th 1805.

N. 45° W.	¼	to an object in a Star^{d} bend
S. 60° W.	1.	to a point in a Lar^{d} bend passing 9 small Isl^{ds}
S. 55° W.	½	to the center of a Star^{d} bend passing one Il^{d} and opt. a 2^{ed}
S. 65° E.	1.	to a clift of rocks in a Star^{d} bend passing 2 Island^{s}
N. 65° E.	1.	to the entrance of a creek 15 Y^{ds} wide on Lar^{d} in a Lar^{d} bend. we call [it] *Howard's Creek.* pa^{d} 1. I^{ld}
S. 15° E.	1.	to the entrance of a small run in a Lar^{d} bend the Mont^{s} here recedes from the river. this run Cap^{t} C. has laid down in mistake for Howard's Creek.
S. 55° W.	1 ½	to the center of a Star^{d} bend
S. 12° W.	2 ½	to a point in a Star^{d} bend
S. 15° E.	3 ½	to a point of high timber on the Lar^{d} passing 3 I^{ds} on Lar^{d}
S. 25° W.	1.	to the center of a Star^{d} bend
East	1 ¼	to the center of a Lar^{d} bend passing 3 Isl^{ds} on Lar^{d} side
S. 20° E.	2 ½	to the center of a Lar^{d} bend passing 4 Isl^{ds} on Lar^{d} S^{d}
S. 48° W.	1 ½	to a rock in the center of a Lar^{d} bend opposite to 2 Isl^{ds} where we encamped for the night on Lar^{d} shore.[1]
Miles	16 ½	[18 ½]

[Clark:] *July 26th Friday 1805*

I deturmined to leave Shabono & one man who had Sore feet to rest & proceed on with the other two to the top of a mountain 12 miles distant west and from thence view the river & vallies a head, we with great dificuelty & much fatigue reached the top at 11 oClock from the top of this mountain I could see the Course of the North fork about 10 miles meandering through a Vallie but could discover no Indians or sign which was fresh. I could also See Some distance up the Small River below, and also the Middle fork. after Satisfying my Self returned to the two me[n] by an old Indian parth, on this parth & in the Mountain we came to a Spring of excessive cold water, which we drank reather freely of as we were almost famished; not with Standing the precautions of wetting my face, hands, & feet, I soon felt the effects of the water. We Contin^d thro a Deep Vallie without a Tree to Shade us scorching with heat to the men who had killed a pore Deer, I was fatigued my feet with Several blisters & Stuck with *prickley pears*. I eate but verry little deturmined to cross to the Middle fork and examine that. we crossed the Missouri which was divided by a verry large Island the first Part was knee deep the other waste deep & very rapid, I felt my Self verry unwell & took up Camp on the little river 3 miles above its mouth & near the place it falls into the bottom a fiew Drops of rain this evening.

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[1] At the base of Eagle Rock. — O. D. WHEELER.

We killed 2 bear which was imediately in our way. both pore emence number of Beaver and orter in this little river which forks in the bottom

[Lewis:] *Saturday July 27th 1805.* —

We set out at an early hour and proceeded on but slowly the current still so rapid that the men are in a continual state of their utmost exertion to get on, and they begin to weaken fast from this continual state of violent exertion. at the distance of 1¾ miles the river was again closely hemned in by high Clifts of a solid limestone rock which appear to have tumbled or sunk in the same manner of those I discribed yesterday. the limestone appears to be of an excellent quality of deep blue colour when fractured and of a light led colour where exposed to the weather. it appears to be of a very fine gr[a]in the fracture like that of marble. we saw a great number of the bighorn on those Clifts. at the distance of 3¾ Ms. further we arrived at 9. A.M. at the junction of the S.E. fork of the Missouri and the country opens suddonly to extensive and bea[u]tifull plains and meadows which appear to be surrounded in every direction with distant and lofty mountains; supposing this to be the three forks of the Missouri I halted the party on the Lar^{d}. shore for breakfast. and walked up the S.E. fork about ½ a mile and ascended the point of a high limestone clift from whence I commanded a most perfect view of the neighbouring country.[1] From this point I could see the S.E. fork at about 7 miles. it is rapid and about 70 Yards wide. throughout the distance I saw it, it passes through a smoth extensive green meadow of fine grass in it's course meandering in several streams, the largest of which passes near the Lar^{d}. hills, of which, the one I stand on is the extremity in this direction. a high wide and extensive plain succeeds the meadow and extends back several miles from the river on the Star^{d}. side and with the range of mountains up the Lar^{d}. side of the middle fork. a large spring arrises in this meadow about ¼ of a mile from the S.E. fork into which it discharges itself on the Star^{d}. side about 400 paces above me. from E. to S. between the S.E. and middle forks a distant range of lofty mountains ran their snow-clad tops above the irregular and broken mountains which lie adjacent to this beautifull spot. the extreme point to which I could see the S.E. fork boar S. 65°. E. distant 7 M. as before observed. between the middle and S.E. forks near their junction with the S.W. fork there is a handsom site for a fortification.[2] it consists of a limestone rock of an oblong form; it's sides perpendicular and about 25 feet high except at the extremity towards the middle fork where it ascends gradually and like the top is covered with a fine terf of greensword. the top is level and contains about 2 Acres. the rock [r]ises from the level plain as if it had been designed for some such purpose. the extreem point to which I can see the bottom and meandering of the Middle fork bears S. 15.E. distant about 14 Miles.

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[1] In the bottom, and almost beneath the cliff on which Lewis stood, there are now the remains of a town, Gallatin City, which has in recent years come into existence and passed away. — O. D. WHEELER.

[2] Probably this was the site of the post built by the Missouri Fur Company in 1810, and abandoned in the autumn of the same year on account of the enmity of the Blackfeet. Remains existed as late as 1870, and were locally known as the ruins of "Lewis and Clark fort." See Montana Historical Society *Transactions*, ii. — ED.

here it turns to the right around a point of a high plain and disappears to my view. it's bottoms are several miles in width and like that of the S.E. fork form one smoth and beautifull green meadow. it is also divided into several streams. between this and the S.W. fork there is an extensive plain which appears to extend up both those rivers many miles and back to the mountains. the extreme point to which I can see the S.W. fork bears S.30.W. distant about 12 Miles. this stream passes through a similar country with the other two and is more divided and serpentine in it's course than either of the others; it a[l]so possesses abundan[t]ly more timber in it's bottoms. the timber here consists of the narrowleafed cottonwood almost entirely. but little box alder or sweet willow the underbrush thick and as heretofore discribed in the quarter of the missouri. a range of high mountains at a considerable distance appear to reach from South to West and are partially covered with snow the country to the right of the S.W. fork like that to the left of the S.E. fork is high broken and mountainous, as is that also down the missouri behind us, through which, these three rivers after assembling their united force at this point seem to have forced a passage. these bottom lands tho' not more than 8 or 9 feet above the water seem never to overflow. after making a draught of the connection and meanders of these streams I decended the hill and returned to the party, took breakfast and ascended the S.W. fork 1¾ miles and encamped at a Lar^d bend in a handsome level smooth plain just below a bayou, having passed the entrance of the middle fork at ½ a mile. here I encamped to wait the return of Cap^t Clark and to give the men a little rest which seemed absolutely necessary to them. at the junction of the S.W. and Middle forks I found a note which had been left by Cap^t Clark informing me of his intended rout, and that he would rejoin me at this place provided he did not fall in with any fresh sighn of Indians, in which case he intended to pursue untill he overtook them calculating on my taking the S.W. fork, which I most certainly prefer as it's direction is much more promising than any other. beleiving this to be an essential point in the geography of this western part of the

Continent I determined to remain at all events untill I obtained the necessary data for fixing it's latitude Longitude &c. after fixing my camp I had the canoes all unloaded and the baggage stoed away and securely covered on shore, and then permitted several men to hunt. I walked down to the middle fork and examined and compared it with the S.W. fork but could not satisfy myself which was the largest stream of the two, in fact they appeared as if they had been cast in the same mould there being no difference in character or size, therefore to call either of these streams the Missouri would be giving it a preference w[h]ich it's size dose not warrant as it is not larger then the other. they are each 90 y^{ds} wide. in these meadows I saw a number of the duckanmalla[r]d [1] with their young which are now nearly grown. Currants of every species as well as goosberries are found her[e] in great abundance and perfection. a large black goosberry which grows to the hight of five or six feet is also found here. this is the growth of the bottom lands and is found also near the little rivulets which make down from the hills and mountains it puts up many stems from the same root, some of which, are partially branched and all reclining. the berry is attatched seperately by a long peduncle to the stem from which they hang pendant underneath. the berry is of an ovate form smooth as large as the common garden goosberry when arrived at maturity and is as black as jet, tho' the pulp is of a c[r]imson colour. this fruit is extreemly asced. the leaf resembles the common goosberry in form but is reather larger and somewhat proportioned to the superior size of it's stem when compared with the common goosberry. the stem is covered with very sharp thorns or bryers. below the t[h]ree forks as we passed this morning I observed many collections of the mud nests of [the] small martin attatched to the smooth face of the limestone rocks sheltered by projections of the same rock above. Our hunters returned this evening with 6 deer 3 Otter and a Musk-rat. they informed me that they had seen great numbers of Antelopes, and much sign of beaver otter deer Elk, &c. at 3 P.M. Capt Clark arrived very sick with a high fever on him and much fatiegued and exhausted. he informed me that he was very sick all last night had a high fever and frequent chills & constant aking pains in all his mustles. this morning notwithstanding his indisposition he pursued his intended rout to the middle fork about 8 miles and finding no recent sign of Indians rested about an hour and came down the middle fork to this place. Capt. C. thought himself somewhat bilious and had not had a passage for several days; I prevailed on him to take a doze of Rushes pills, which I have always found sovereign in such cases and to bath his feet in warm water and rest himself. Capt. C's indisposition was a further inducement for my remaining here a couple of days; I therefore informed the men of my intention, and they put their deer skins in the water in order to prepare them for dressing tomorrow. we begin to feel considerable anxiety with rispect to the Snake Indians. if we do not find them or some other nation who have horses I fear the successfull issue of our voyage will be very doubtfull or at all events much more difficult in it's accomplishment. we are now several hundred miles within the bosom of this wild and mountanous country, where game may rationally be expected shortly to become scarce and subsistence precarious without any information with rispect to the country not knowing how far these mountains continue, or wher to direct our course to pass them to advantage or intersept a navigable branch of the Columbia, or even were we on such an one the probability is that we should not find any timber within these mountains large enough for canoes if we judge from the portion of them through which we have passed. however I still hope for the best, and intend taking a tramp myself in a few days to find these yellow gentlemen if possible. my two principal consolations are that from our present position it is impossible that the S.W. fork can head with the waters of any other river but the Columbia, and that if any Indians can subsist in the form of a nation in these mountains with the means they have of acquiring food we can also subsist. Capt. C. informed me that there is a part of this bottom on the West side of the Middle fork, near the plain, which appears to overflow occasionally and is stony.

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[1] A now obsolete name for the mallard duck (*Anas boscas*). — ED.

Courses and distances of July 27th 1805.

N. 65° W.	½	to the center of a Stard bend passing an Island.
South	1 ¼	to a clift of high rocks on the Stard here the river is again confined between high and perpendicular clifts of rock.
S. 2° E.	2 ½	to the center of a Lard bend passing a small Island
S. 45. W.	1 ¼	to the upper point of a high clift of rocks in a Stard opposite or a little below the entrance of the S.E. fork of the Missouri which we called *Gallitin's river* in honor of Albert Gallitin Secretary of the Treasury
S. 45° W.	½	to the confluence of the middle and SW. forks of the Missouri each 90 yds wide; the Middle fork we called Maddison's river in honor of James Maddison the Secretary of State. and the S.W. fork we called Jefferson's River in honor [of] that illustrious per[s]onage Thomas Jefferson President of the United States.
N. 45° W.	¼	to the entrance of a Bayou on Stard side
S. 30° W.	½	to a Stard bend.
S. 20° E.	¼	to the center of a Lard bend where we encamped on Lard in Camp Island.
Miles	7.	

[Clark:] *July 27th Saturday 1805 —*

I was verry unwell all last night with a high fever & akeing in all my bones. My fever &c. continus, deturmind to prosue my intended rout to the Middle fork, accordingly Set out in great pain across a Prarie 8 miles to the Middle [fork] this fork is nearly as large as the North fork & appears to be more rapid, we examined and found no fresh Sign of Indians, and after resting about an hour proceeded down to the junction thro a wide bottom which appears to be overflown every year, & maney parts Stoney. this river has Several Islands and number of beaver & orter, but little timber, we could See no fresh Sign of Indians just above the Point I found Capt Lewis encamped haveing arrived about 2 oClock. Several Deer killed this evening. I continue to be verry unwell fever verry high, take 5 of rushes pills & bathe my feet & legs in hot water

CHAPTER XIII

FROM THE THREE FORKS OF THE MISSOURI TO BEAVER'S HEAD

Lewis's Journal, July 28—August 10, 1805
Clark's Journal, July 28—August 10

[Lewis:]

Sunday July 28th. 1805.

My friend Capt. Clark was very sick all last night but feels himself somewhat better this morning since his medicine has opperated. I dispatched two men early this morning up the S.E. Fork to examine the river; and permitted sundry others to hunt in the neighbourhood of this place. Both Capt. C. and myself corrisponded in opinon with rispect to the impropriety of calling either of these streams the Missouri and accordingly agreed to name them after the President of the United States and the Secretaries of the Treasury and state having previously named one river in honour of the Secretaries of War and Navy. In pursuance of this resolution we called the S.W. fork, that which we meant to ascend, Jefferson's River in honor of that illustrious personage Thomas Jefferson. [*the author of our enterprize.*] the Middle fork we called Madison's River in honor of James Madison, and the S.E. Fork we called Gallitin's River in honor of Albert Gallitin. the two first are 90 yards wide and the last is 70 yards. all of them run with great volocity and th[r]ow out large bodies of water. Gallitin's River is reather more rapid than either of the others, is not quite as deep but from all appearances may be navigated to a considerable distance. Capt. C. who came down Madison's river yesterday and has also seen Jefferson's some distance thinks Madison's reather the most rapid, but it is not as much so by any means as Gallitin's. the beds of all these streams are formed of smooth pebble and gravel, and their waters perfectly transparent; in short they are three noble streams. there is timber enough here to support an establishment, provided it be erected with brick or stone either of which would be much cheaper than wood as all the materials for such a work are immediately at the spot. there are several small sand-bars along the shores at no great distance of very pure sand and the earth appears as if it would make good brick. I had all our baggage spread out to dry this morning; and the day proving warm, I had a small bower or booth erected for the comfort of Capt. C. our leather lodge when exposed to the sun is excessively hot. I observe large quantities of the sand rush in these bottoms which grow in many places as high as a man's breast and stand as thick as the stalks of wheat usually do. this affords one of the best winter pastures on earth for horses or cows, and of course will be much in favour of an establishment should it ever be thought necessary to fix one at this place. the grass is also luxouriant and would afford a fine swarth of hay at this time in parsels of ma[n]y acres together. all those who are not hunting altho' much fatiegued are busily engaged in dressing their skins, making mockersons lexing [leggings] &c to make themselves comfortable. the Musquetoes are more than usually troublesome, the knats are not as much so. in the evening about 4 O'Ck the wind blew hard from South West and after some little time brought on a Cloud attended with thunder and Lightning from which we had a fine refreshing shower which cooled the air considerably; the showers continued with short intervals untill after dark. in the evening the hunters all returned they had killed 8 deer and 2 Elk, some of the deer wer[e] in excellent order. those whome I had sent up Gallitin's river reported that after it passed the point to which I had seen it yesterday that it turned more to the East to a considerable distance or as far as they could discover the opening of the Mountains formed by it's valley which was many miles. the bottoms were tolerably wide but not as much so as at or near it's mouth. it's current is rappid and the stream much divided with islands but is sufficiently deep for canoe navigation. Our present camp is precisely on the spot that the Snake Indians were encamped at the time the

Minnetares of the Knife R. first came in sight of them five years since. from hence they retreated about three miles up Jeffersons river and concealed themselves in the woods, the Minnetares pursued, attacked them, killed 4 men 4 women a number of boys, and mad[e] prisoners of all the females and four boys, *Sah-cah-gar-we-ah* o[u]r Indian woman was one of the female prisoners taken at that time; tho' I cannot discover that she shews any immotion of sorrow in recollecting this event, or of joy in being again restored to her native country; if she has enough to eat and a few trinkets to wear I beleive she would be perfectly content anywhere.

Point of observation N^{o}. 39.

At our encampment on Camp Island, near the junction of the three forks of the Missouri.

Observed Equal Altitudes of ⊙ with Sextant.

	h m s		h m s		
A.M.	8. 42. 10	P.M.	4. 21. 46.	accurate.	Alt^{d} at the time of Observ^{tns}.
	". 43. 42		". 23. 21.	doubtfull.	° ′ ″
	". 45. 15		". lost by Clouds		72. 8. 15.

	° ′ ″
Observed Meridian Altitude of ⊙'s L.L. with Octant by the back observation	58. 35. –.
Latitude deduced from this observation.	45° 24′ 54.″

[Clark:]

July 28th Sunday 1805

I was verry unwell all night, Something better this morning, a very worm day untill 4 oClock when the wind rose & blew hard from the SW. and was Cloudy, The Thermome^{t} Stood at 90° above 0′ in the evening a heavy thunder Shower from the SW. which continued at intervales untill after dark, Several deer killed to day men all employed dressing Skins for Clothes & Mockersons, two men went up the East fork & reports that it is nearly the Size of the N. fork, verry rapid & has maney Islands. Our present Camp is the prosize Spot the Snake Indians were Camped at the time the *Minetarries* came in Sight, attacked & killed 4 men 4 women & a number of boys, & made prisoners of all the females & 4 boys.

[Lewis] *Monday July 29th 1805.*

This morning some of the hunters turned out and returned in a few hours with four fat bucks, the venison is now very fine we have killed no mule deer since we lay here, they are all of the longtailed red deer which appear qu[i]te as large as those of the United States. the hunters brought in a living young sandhill crain; it has nearly obtained it's growth but cannot fly; they had pursued it and caught it in the meadows. it's colour is precisely that of the red deer. we see a number of the old or full grown crains of this species feeding in these meadows. this young animal is very f[i]erce and strikes a severe blow with his beak; after amusing myself with it I had it set at liberty and it moved off apparently much pleased with being releived from his captivity. the men have been busily engaged all day in dising [dressing] skins and making them into various garments all are leather dressers and taylors. we see a great abundance of fish in the stream some of which we take to be trout but they will not bite at any bate we can offer them. the King fisher is common on the river since we have left the falls of the Missouri. we have not seen the summer duck since we left that place, nor do I beleive that it is an inhabitant of the Rocky mountains. the Duckanmallard were first seen with their young on the 20th inst. and I forgot to note it; they are now abundant with their young but do not breed in the missouri below the mountains. the grasshopers and crickets are abundant in the plains as are also the small birds frequently mentioned. there is also in these plains a large ant with a redish brown body and legs, and a black head and abdomen; they construct little perimids of small gravel in a conic shape, about 10 or 12 inches high without a mixture of sticks and with but little earth. Capt. Clark is much better today, is perfectly clear of fever but still very languid and complains of a general soarness in all his limbs. I prevailed on him to take the barks which he has done and eate tolerably freely of our good venison.

Today I continued my observations. ⊙'s magnetic Azimuth.

	Time by Chronometer	Azimuth by Circumferentor	Altitude of ⊙ L. L. with Sextant.
	h m s	°	° ' "
A.M.	8. 48. 9	N. 85. E.	73. –. –.
	8. 53. 57	N. 86. E.	74. 58. 15.

Observed Equal Altitudes of the Sun with Sextant.

				Altitude by Sextant at the time of Observ^{n}
A.M.	8. 57. 5.5	P.M.	4. 5. 50.	
	". 58. 41.		". 7. 24.	° ' "
	9. –. 14.		". 8. 59	77. 4. 45.

Observed Meridian Altitude of the ⊙'s L.L. with Octant by the back observation	° ' " 59. 7. –.
Latitude deduced from this observation	N. 45. 23. 23.1.
Mean Latitude from 2 Mer^{ds} Alt^{ds} of ⊙'s L.L.	N. 45. 24. 8.5

Observed time and Distance of ⊙'s and ☽'s nearest Limbs with Sextant. ⊙ West.

	Time	Distance.		Time.	Distance.
	h m s	° ' "		h m s	° ' "
P.M.	4. 14. 42	49. 43. 30.	P.M.	4. 45. 25.	49. 54. –.
	". 17. 24	". 44. –.		". 46. 37.	". 54. 45.
	". 19. 34	". 44. 45.		". 47. 40.	". 55. 15
	". 21. 12	". 45. –.		". 48. 52.	". 55. 45.
	". 22. 9	". 45. 54.		". 49. 47.	". 56. 15.
	". 23. 12	". 46. 30.		". 50. 44.	". 56. 45.
	". 24. 14	". 46. 45.		". 51. 36.	". 57. 15
	". 25. 18	". 47. –.		". 52. 36.	". 57. 45.
	". 26. 26	". 47. 15.		". 53. 37.	". 58. –.
	". 27. 24	". 47. 30.		". 54. 36.	". 58. 15.

Observed Magnetic Azimuth of the Sun.

	Time By Chronometer	Azimuth by Circumfer^{r}	Altitude of ⊙'s L.L. by Sextant.
	h m s	°	° ' "
P.M.	5. 7. 47.	S. 72. W.	55. 44. 30.
	5. 13. 4.	S. 73. W.	53. 52. 45.

Observed time and Distance of ☽'^{s} Western limb from *a* Antares, with Sextant ✱ East.

	Time			Distance				Time			Distance.		
	h	m	s	°	′	″		h	m	s	°	′	″
P.M.	8.	42.	16	68.	56.	–.	P.M.	9.	1.	12	68.	46.	–.
	".	50.	55	".	52.	30		".	3.	1	".	45.	30.
	".	54.	44	".	49.	45		".	4.	47	".	45.	–.
	".	55.	56	".	49.	–.		".	6.	27	".	44.	–.
	".	58.	53	".	47.	15.		".	8.	31	".	13.	45.

Observed the Azimuth of the Pole Star.

Time by Chronometer	Azimuth by Circumferenter
P.M. 9^{h}. 27^{m}.	N. 13°. W.

[Clark:] *July 29 Monday 1805*

A fair morning wind from the North I feel my Self something better to day, made some Celestial observations took two Merd^{n}. altitudes which gave for Lat.^{d} *45° 22′ 34″ N* men all dressing skins &c.

[Lewis:] *Tuesday July 30th. 1805.*

Cap^{t}. Clark being much better this morning and having completed my observations we reloaded our canoes and set out, ascending Jeffersons river. Sharbono, his woman two invalleds and myself walked through the bottom on the Lar^{d}. side of the river about 4½ miles when we again struck it at the place the woman informed us that she was taken prisoner. here we halted untill Cap^{t}. Clark arrived which was not untill after one P.M. the water being strong and the river extreemly crooked. we dined and again proceeded on; as the river now passed through the woods the invalleds got on board together with Sharbono and the Indian woman; I passed the river and continued my walk on the Star^{d}. side. saw a vast number of beaver in many large dams which they had maid in various bayoes of the river which are distributed to the distance of three or four miles on this side of the river over an extensive bottom of timbered and meadow lands intermixed. in order to avoid these bayoes and beaver dams which I fou[n]d difficult to pass I directed my course to the high plain to the right which I gained after some time with much difficulty and waiding many beaver dams to my waist in mud and water. I would willingly have joined the canoes but the brush were so thick, the river crooked and bottoms intercepted in such manner by the beaver dams, that I found it uceless to attempt to find them, and therefore proceeded on up the river in order to intersept it where it came near the plain and woult be more collected into one channel. at length about sunset I arrived at the river only about six miles from my calculation on a direct line from the place I had left the canoes but I thought they were still below me. I found the river was divided where I reached it by an Island and was therefore fearfull that they might pass without my seeing them, and went down to the lower point of the large island; here I discovered a small Island, close under the shore on which I was; I passed the narrow channel to the small island and examined the gravly bar along the edge of the river for the tracks of the men, knowing from the appearance of the river at this place that if they had passed they would have used the cord on the side where I was. I saw no tracks and was then fully convinced that they were below me. I fired my gun and hallooed but counld hear nothing of them. by this time it was getting nearly dark and a duck lit on the shore in about 40 steps of me and I killed it; having now secured my supper I looked our for a suitable place to amuse myself in combating the musquetoes for the ballance of the evening. I found a parsel of drift wood at the head of the little Island on which I was and immediately set it on fire and collected[1] some willow brush to lye on. I cooked my duck which I found very good and after eating it layed down and should have had a comfortable nights lodge but for the musquetoes which infested me all night. late at night I was awakened by the nois of some animal runing over the stoney bar on which I lay but did not see it; from the weight with which it ran I supposed it to be either an Elk or a brown bear. the latter are very abundant in this neighbourhood. the night was cool but I felt very little inconvenience from it as I had a large fire all night. Capt. Clark had proceeded on after I seperated from him and encamped on a islad. only about 2 miles below me but did not hear the report of my gun nor of my hooping. I saw some deer and antelopes.

The Courses and distances of July 30th. 1805.

N. 70°. W.	¼	to a Stard. bend, passing timber on both sides
S. 20°. W.	½	to a Stard. bend passing an Island.
S. 80°. E.	¼	to a Lard. bend.
S. 50°. W.	½	to the lower point of an Island.
South	½	to a Lard. bend
S. 45°. W.	⅛	to a tree in the Lard. bend
N. 45°. W.	¼	to the upper point of an island
West	½	to a Lard. bend opposite an Island
N. 60°. W.	⅛	to a channel passing through the Island
South –	¼	to a Lard. bend opposite to an Island, passing severall small Bayous on the Lard. side.
West	½	to the upper point of an Island passing a Bayou on the Lard. side.
S. 70°. W.	¼	to the entrance of a Bayou on Lard. side
West	1	to the upper point of an Island, passing the upper point of another Island ¼, one at ¾ and two bayous on Lard. side.
S. 60°. W.	1.	to a high bank in a Stard. bend.
S. 35°. W.	¾	to the upper point of a bluff in a Stard. bend opposite to an Island.
S. 45°. E.	¾	to a Lard. bend, passing the upr. pt. of an Isld. and a bayou Lard.
S. 35°. W.	¼	to a Lard. bend opposite an Island.
West .	¼	to a Stard. bend opposite an Isld. having passed another
S. 30°. W.	¾	to an Island in a Stard. bend opposite a high plain Stard.
S. 20°. W.	1 ¼	to a clift of rocks under a mountain Stard. side having passed an Island.
South	½	to a point on the Stard. side.
S. 30°. W.	¼	to a high clift of craiggey rocks on the Stard. opt. 1 Isd.
S. 45°. W.	⅛	to a Stard. bend under a Clift.
S. 45°. E.	¼	to a Bayou in a Lard. bend passing an Island.
S. 60°. W.	⅛	to a Bayou in a Stard. bend above an Island
S. 50°. E.	¼	to a Bayou in a Lard. bend, opposite several small Islds.

S. 45° W.	¼	to the mouth of a Bayou in a Lar^{d} bend.
S. 20° W.	¼	to a Bayou in a Lar^{d} bend, passing the upper point of an Isl^{d} on Lar^{d}
S. 70° W.	¼	to a Star^{d} bend where the party encamped for the night

[Clark:] *July 30th Monday 1805*

We Set out 8 oClock and proceeded on 13½ miles up the N. fork the river verry rapid & Sholey the Channel entirely Corse gravel many Islands and a number of Chanels in different directions thro' the bottom &c. Passed the place the Squar interpretress was taken, one man with his Sholder Strained, 2 with Tumers, we Camped on the St^{d} Side the evening Cool. Cap^{t} Lewis who walk^{d} on Shore did not join me this evening

[Lewis:] *Wednesday July 31st 1805.*

This morning I waited at my camp very impatiently for the arrival of Cap^{t} Clark and party; I observed by my watch t[h]at it was 7. A. M. and they had not come in sight. I now became very uneasy and determined to wait until 8 and if they did not arrive by that time to proceed on up the river taking it as a fact that they had passed my camp some miles last evening. just as I set out to pursue my plan I discovered Charbono walking up shore some distance below me and waited untill [he] arrived I now learnt that the canoes were behind, they arrived shortly after. their detention had been caused by the rapidity of the water and the circuitous rout of the river. they halted and breakfasted after which we all set out again and I continued my walk on the Star^{d} shore the river now becomes more collected the islands tho' numerous ar generally small. the river continues rapid and is from 90 to 120 y^{ds} wide has a considerable quantity of timber in it's bottoms. towards evening the bottoms became much narrower and the timber much more scant. high hills set in close on the Lar^{d} and the plain high waivy or reather broken on the Star^{d} and approach the river closely for a sho[r]t distance vally above 1½ M. w^{d} About one mile above Cap^{t} Clark's encampment of the last evening the principall entrance of a considerable river discharges itself into Jefferson's river. this stream is a little upwards of 30 y^{ds} wide disc[h]arges a large quantity of very clear water it's bed like that of Jefferson's river is pebble and gravel. it takes it's rise in the snowclad mountains between Jefferson's and Madison's Rivers to the S.W. and discharges itself into the former by seven mouths it has some timber in it's bottoms and vas[t] numbers of beaver and Otter. this stream we call River Philosophy. the rock of the clifts this evening is a hard black grannite like that of the clifts of most parts of the river below the limestone clifts at the 3 forks of the Missouri. this evening just before we encamped Drewyer discovered a brown bear enter a small cops of bushes on the Lar^{d} side; we surrounded the place an[d] surched the brush but he had escaped in some manner unperceived but how we could not discover. nothing killed today and our fresh meat is out. when we have a plenty of fresh meat I find it impossible to make the men take any care of it, or use it with the least frugallity. tho' I expect that necessity will shortly teach them this art. the mountiains on both sides of the river at no great distance are very lofty. we have a lame crew just now, two with tumers or bad boils on various parts of them, one with a bad stone bruise, one with his arm accedently dislocated but fortunately well replaced, and a fifth has streigned his back by sliping and falling backwards on the gunwall of the canoe. the latter is Serg^{t} Gass. it gives him great pain to work in the canoe in his present situation, but he thinks he can walk with convenience, I therefore scelected him as one of the party to accompany me to-morrow, being determined to go in quest of the Snake Indians. I also directed Drewyer and Charbono to hold themselves in readiness. Charbono thinks that his ankle is sufficiently recovered to stand the march but I entertain my doubts of the fact; he is very anxious to accompany me and I therefore indulge him. There is some pine on the hills on both sides of the river opposite to our encampment which is on the Lar^{d} side upon a small island just above a run. the bull rush & Cat-tail flag grow in great abundance in the moist parts of the bottoms the dryer situations are covered with fine grass, tanzy, thistles, onions and flax. the bottom land fertile and of a black rich loam. the uplands poor sterile and of a light yellow clay with a mixture of small smooth pebble and gravel, p[r]oducing prickley pears, sedge and the bearded grass in great abundance; this grass is now so dry that it would birn like tinder. we saw one bighorn today a few antelopes and deer.

Courses and distances of July 31st 1805.

West	⅛	to a bayou in a Star^d bend.
South	1	to a bayou on the Lar^d side at the principal entrence of River Philosophy which is 30 y^{ds} wide and discharges itself from hence downwards on Lar^d side by five other mouths, and one above.
West	¾	to the entrance of a bayou in a Star^d bend passing 2 small Islands one on each side.
South	½	to a Lar^d bend opposite 2 Islands.
S. 45° W.	½	to a point on Lar^d side passing a bayou Lar^d S^d
West	½	to a tree in a Star^d bend
South	⅛	in the Star^d bend.
S. 60° E.	¼	to a prarie above some willows on the Lar^d side
S. 25° W.	¼	to the lower point of an Island.
East	⅛	to the upper entrance of Philosophy River, La^d
South 20 W	1 ¼	to a Star^d bend passing 2 small Islands.
S. 25° E.	¼	to a Lar^d bend
S. 45° W.	⅛	to a Star^d bend.
South	¼	to a Lar^d bend.
S. 20° W.	¾	in the Lar^d bend to a point opposite to an Isl^d
West	½	to a small bayou in a Lar^d bend
S. 60° W.	1.	to the head of an Island
S. 45° W.	1 ¼	to a clift of the mountain on Lar^d side; passing an Island on Star^d
S. 80° W.	½	to the clift of a high hill on Star^d here the clifts put in close on both sides leaving narrow bottoms.
S. 45° W.	¾	to a low bluff above a Lar^d clift in a Lar^d bend.
N. 45° W.	1.	to a point of rock on the Star^d side, here the hills receede from the river bottoms 1 ½ M^l wide.
S. 80° W.	¼	to a Lar^d bend, an Isl^d on Lar^d side.
N. 80° W.	1.	to a Star^d bend passing an Isl^d
S. 60° W.	¾	to a small island in the Star^d bend.
South	⅛	to a tree in a Lar^d bend.
S. 70° W.	¾	to a Star^d bend passing an Island.

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S. 20°	W.	1 ¾	to the foot of a mountain on a Lar^{d} bend
N. 70°	W.	¾	to a Star^{d} bend.
S. 70°	W.	½	to some bushes in a Lar^{d} bend, passing the entrance of a small run on Lar^{d} just above which we encamped on a small Isl^{d} near the Lar^{d} side.[1]
Miles		17 ⅝	

[Clark:] *July 31st Tuesday* 1805

a fair Morning Cap^{t} Lewis out all night, we arrived at his Camp to brackfast, he was without a blanket, & he killed a Duck whiche [he] Suped on &c. the river as yesterday Sholey & rapid, passed the lower mouth of a Small river on the Lar^{d} in the morning & the upper mouth a [blank space in MS.] Miles above, this little river is the one I camped on the 26th & heads in the Snow mountains[2] to the S.W. proceeded on verry well and Camped on a Small Island a little above the place I Camped the 25th instant at the mouth of a run on the Lar^{d} Side, the bottoms from the Mouth of the river extend to 2^{1}/$_{[2]}$ Miles & enter a Short & high hill which is about 1 mile thro' and, the river then passes thro a 2^{d} vallie of about 1½ Miles wide, Some Islands. below this Knobe the river is Crouded with Islands, we are out of fresh meet, & nothing killed to day The Mountains on either Side is high & rough we have two men with toumers and unable to work.

Cap^{t} Lewis deturmin to proceed on with three me[n] in Serch of the Snake Indians, tomorrow

[Lewis — apparently the first draft:][3] *August 1st* 1805 —

At half after 8 A. M. we halted for breakfast and as had been previously agreed on between Capt. Clark and myself I set out with 3 men in quest of the Snake Indians. the men I took were the two Interpreters Drewyer and Sharbono and Serg! Gass who by an accedental fall had so disabled himself that it was with much pain he could work in the canoes tho' he could march with convenience. the rout we took lay over a rough high range of mountains on the North side of the river. the rive[r] entered these mountains a few miles above where we left it. Capt. Clark recommended this rout to me from a belief that the river as soon as it past the mountains boar to the N. of W. he having a few days before asscended these mountains to a position from which he discovered a large valley passing between the mountains and which boar to the N. West. this however p[r]oved to be the inlet of a large creek which discharged itself into the river just above this range of mountains, the river bearing to the S. W. we were therefore thrown several miles out of our rout. as soon as we discovered our mistake we directed our course to the river which we at length gained about 2 P. M. much exhausted by the heat of the day the roughness of the road and the want of water. the mountains are extreemly bare of timber and our rout lay through the steep valleys exposed to the heat of the sun without shade and scarcely a breath of air; and to add to my fatiegue in this walk of about 11 miles I had taken a doze of glauber salts in the morning in consequence of a slight desentary with which I had been afflicted for several days; being weakened by the disorder and the opperation of the medecine I found myself almost exhausted before we reached the river. I felt my sperits much revived on our near approach to the river at the sight of a herd of Elk of which Drewyer and myself killed two. we then hurried to the river and allayed our thirst. I ordered two of the men to skin the Elk and bring the meat to the river while myself and the other prepared a fire and cooked some of the meat for our dinner. we made a comfortable meal of the Elk and left the ballance of the meat on the bank of the river [for] the party with Capt. Clark. this supply was no doubt very acceptable to them as they had had no fresh meat for near two days except one beaver Game being very scarce and shy. we had seen a few deer and some goats but had not been fortunate enough to kill any of them. after dinner we resumed our march and encamped about 6 M. above on the Star^{d} side of the river.

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[1] At the entrance to Antelope Creek, which falls into the Jefferson a little above Sapington, the terminus of a Northern Pacific spur. — ED.

[2] The South Boulder range. At this point, Clark gives (Codex G, pp. 34–37) his "Course of the Missouri from the gate to the three forks," which we transfer to "Scientific Data," in vol. v. — ED.

[3] The entries for August 1–4, which we here designate as "apparently the first draft," are contained in Codex Fa. They are practically duplicates of the (apparently) second draft entries in Codex F, for the same dates; but we give them as showing his methods. — ED.

[Lewis — apparently the second draft:] *Thursday August* 1st 1805.

This morning we set out early and proceeded on tolerably well untill 8 OC'k by which time we had arrived within a few miles of a mountain through which the river passes. we halted on the Star^{d} side and took breakfast. after which or at ½ after 8.A.M. as had been previously concerted betwe[e]n Cap^{t} Clark and myself I set out with three men in surch of the Snake Indians or Sosonees. our rout lay over a high range of mountains on the North side of the river. Capt C. recommended this rout to me no doubt from a beleif that the river as soon as it passed this chain of mountains boar to the N. of W. he having on the 26th ul^{t} ascended these mountains to a position from whence he discovered a large valley passing between the mountains which boar to the N.W. and presumed that the river passed in that direction; this however proved to be the passage of a large creek [1] which discharged itself into the river just above this range of mountains, the river bearing to the S.W. we were therefore thrown several miles out of our rout. as soon as we discovered our error we directed our course to the river which we at length gained about 2 P.M. much exhausted by the heat of the day, the roughness of the road and the want of water. the mountains are extreemly bare of timber, and our rout lay through the steep and narrow hollows of the mountains exposed to the inte[n]se heat of the midday sun without shade or scarcely a breath of air: to add to my fatiegue in this walk of about 11 milles, I had taken a doze of glauber salts in the morning in consequence of a slight disentary with which I had been afflicted for several days. being weakened by the disorder and the operation of the medicine I found myself almost exhausted before we reached the river. I felt my sperits much revived on our near approach to the river at the sight of a herd of Elk, of which Drewyer and myself soon killed a couple. we then hurryed to the river and allayed our thirst. I ordered two of the men to skin the Elk and bring the meat to the river, while myself and the other prepared a fire and cooked some of the meat for our dinner. we made a comfortable meal on the Elk, and left the ballance of the meat and skins on the bank of the river for Capt. Clark and party. this supply will no doubt be acceptable to them, as they had had no fresh meat when I left them for almost 2 days except one beaver; game being very scarce and shy above the forks. we had seen a few deer and antelopes but had not been fortunate enough to kill any of them. as I passed these mountains I saw a flock of the black or dark brown phesants; the young phesant is almost grown we killed one of them. this bird is fully a third larger than the common phesant of the Atlantic states. it's form is much the same. it is booted nearly to the toes and the male has not the tufts of long black feathers on the sides of the neck which are so conspicuous in those of the Atlantic. their colour is a uniform dark brown with a small mixture of yellow or yelloish brown specks on some of the feathers particularly those of the tail, tho' the extremities of these are perfectly black for about one inch. the eye is nearly black, the iris has a small dash of yellowish brown. the feathers of the tail are reather longer than that of our phesant or pattridge as they are Called in the Eastern States; are the same in number or eighteen and all nearly of the same length, those in the intermediate part being somewhat longest. the flesh of this bird is white and agreeably flavored. I also saw near the top of the mountain among some scattering pine a blue bird about the size of the common robbin.[1] it's action and form is somewhat that of the jay bird and never rests long in any one position but constantly flying or hoping from sprey to sprey. I shot at one of them but missed it. their note is loud and frequently repeated both flying and when at rest and is char âh′, cha′r-âh, char-âh′, as nearly as letters can express it. after dinner we resumed our march and my pack felt much lighter than it had done about 2 hours before. we traveled about six miles further and encamped on the star^d. bank of the river, making a distance of 17 miles for this day. the Musquetoes were troublesome but I had taken the precaution of bringing my bier.

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[1] North Boulder Creek; named by the explorers Fields' Creek. — Ed.

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[1] Coues identifies this as the blue crow, or Cassin's or Maximilian's jay (*Gymnokitta cyanocephala*); here first discovered and described, but not scientifically named till 1841. — ED.

Shortly after I left Capt. Clark this morning he proceed[ed] on and passed through the mountains; they formed tremendious clifts of ragged and nearly perpendicular rocks; the lower part of this rock is of the black grannite before mentioned and the upper part a light coloured freestone. these clifts continue for 9 miles and approach the river very closely on either side. he found the current verry strong. Cap^t. C. killed a big horn on these clifts which himself and party dined on. after passing this range of mountains he entered this beautifull valley in which we also were it is from 6 to 8 miles wide. the river is crooked and crouded with islands, it's bottoms wide fertile and covered with fine grass from 9 inches to 2 feet high and possesses but a scant proportion of timber, which consists almost entirely of a few narrow leafed cottonwood trees distributed along the verge of the river. in the evening Cap^t. C. found the Elk I had left him and ascended a short distance above to the entrance of a large creek which falls in on Star^d. and encamped opposite to it on the Lar^d. side. he sent out the two Fieldses to hunt this evening and they killed 5 deer, which with the Elk again gave them a plentifull store of fresh provisions. this large creek we called Field's Creek after Reubin Fields one our party. on the river about the mountains w[h]ich Cap^t. C. passed today he saw some large cedar trees and some juniper also. just at the upper side of the mountain there is a bad rappid here the toe line of our canoe broke in the shoot of the rapids and swung on the rocks and had very nearly overset. a small distance above this rapid a large bold Creek falls in on Lar^d. side which we called Frazier's Creek after Rob^t. Frazier.[1] They saw a large brown bear feeding on currants but could not get a shoot at him.

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[1] Now South Boulder Creek. — ED.

Courses and distances as navigated with the Canoes on the 1st of August 1805.

N. 30° W.	1	to a point of rocks on the Lar^d side, at this place the river passes through perpendicular Clifts.
N. 60° W.	¾	to the upper part of the rocks in a Star^d bend
S. 70° W.	½	to a clift on the Lar^d side
S. 45° W.	½	to a Star^d bend
S. 26° W.	1 ¾	to a bluff on the Star^d side.
South	½	to a Lar^d bend, at this place the river enters a high mountain of steep and ruggid clifts on both sides.
N. 30° W.	1 ¼	to a Star^d bend under a high clift
N. 80° W.	¼	to a clift of high rocks in a Star^d bend a small bottom on Lar^d side.
S. 60° W.	½	to a Lar^d bend under a piney hill.
N. 25° W.	¼	to a small Island on the Lar^d side
N. 30° E.	¼	to a Star^d bend high clifts on both sides
N. 80° W.	¾	to the entrance of a large creek on Lar^d side passing an island and rapid of 6 feet fall; these we called Frazier's falls and Creek after Robert Frazier one of our party. here the river again enters a valley.
North	½	to a Star^d bend under a hill.
N. 45° W.	½	to a Lar^d bend
N. 70° W.	1 ½	to the point of an Island passing several smal[l] Isl^{ds}
North	¼	to a Star^d bend.
West	¾	to the lower point of an Island
N. 45° W.	¼	to the entrance of a Large creek on Star^d w[h]ich we called Field's Creek, after Reubin Fields one of our party. opposite to which encamped on Lar^d side.
Miles.	13	

[Clark:]

August 1st Wednesday 1805

A fine day Cap^t Lewis left me at 8 oClock just below the place I entered a verrey high mountain which jutted its treme[n]dious Clifts on either Side for 9 Miles, the rocks ragide Some verry dark & other part verry light rock the light rocks is Sand Stone. The water Swift & very Sholey. I killed a *Ibix* on which the whole party Dined, after passing through the Mountain we entered a wide exte[n]sive Vallie of from 4 to 8 Miles wide verry leavell a Creek falls in at the Commencement of this Vallie on the Lar^d Side, the river widens & spreds into Small Chanels. W[e] encamped on the Lar^d Side opposit a large Creek I sent out Jo: & R fields to hunt this evening they killed 5 Deer, I saw a large Bear eateing Currents this evining The river so rapid that the greatest exertion is required by all to get the boats on wind SW Murckery at sun rise 50° Ab. 0

[Lewis — apparently the first draft:] *August 2nd 1805*

We resumed our march this morning at sunrise the weather was fair and wind from N. W. finding that the river still boar to the south I determined to pass it if possible to shorten our rout this we effected about five miles above our camp of last evening by wading it. found the current very rappid about 90 yards wide and waist deep. this is the first time that I ever dared to make the attempt to wade the river, tho' there are many places between this and the three forks where I presume it migh[t] be attempted with equal success. the valley th[r]ough which our rout of this [day] lay and through which the river winds it's meandering course is a beatifull level plain with but little timber and that on the verge of the river. the land is tolerably fertile, consisting of a black or dark yellow loam, and covered with grass from 9 Inches to 2 feet high. the plain ascends gradually on either side of the river to the bases of two ranges of mountains which ly parralel to the river and which terminate the width of the vally the tops of these mountains were yet partially covered with snow while we in the valley were suffocated nearly with the intense heat of the midday sun. the nights are so could that two blankets are not more than sufficient covering. we found a great [many] courants, two kinds of which were red, others yellow deep purple and black. also black goosburies and service buries now ripe and in full perfection, we feasted su[m]ptuously on our wild fruit particularly the yellow courant and the deep purple servicebury which I found to be excellent the courrant grows very much like the red currant common to the gardens in the atlantic states tho' the leaf is somewhat different and the growth taller. the service burry grows on a smaller bush and differs from ours only in colour and the superior excellence of it's flavor and size, it is of a deep purple. this day we saw an abundance of deer and goats or antelopes and a great number of the tracks of Elk; of the former we killed two. we continued our rout along this valley which is from six to eight Miles wide untill sun set when we encamped for the night on the river bank having traveled about 24 miles. I feel myself perfectly recovered of my indisposition and do not doubt being able to pursue my march with equal comfort in the morning.

[Lewis — apparently the second draft:] *Friday August 2nd 1805.*

We resumed our march this morning at sunrise; the [day] was fair and wind from N.W. finding that the river still boar to the South I determined to pass it if possible in order to shorten our rout; this we effected by wading the river about 5 miles above our encampment of the last evening. we found the current very rapid waist deep and about 90 yds. wide. bottom smooth pebble with a small mixture of coarse gravel. this is the first time that I ever dared to wade the river, tho' there are many places between this and the forks where I presume it might be attempted with equal success. The valley along which we passed today, and through which the river winds it's meandering course is from 6 to 8 miles wide and consists of a bea[u]tifull level plain with but little timber and that confined to the verge of the river; the land is tolerably fertile, and is either black or a dark yellow loam, covered with grass from 9 inches to 2 feet high. the plain ascends gradually on either side of the river to the bases of two ranges of high mountains, which lye parallel to the river and prescribe the limits of the plains. the tops of these mountains are yet covered partially with snow, while we in the valley are nearly suffocated with the intense heat of the mid-day sun; the nights are so cold that two blankets are not more than sufficient covering. soon after passing the river this morning Sergt. Gass lost my tommahawk in the thick brush and we were unable to find it, I regret the loss of this usefull implement, however accedents will happen in the best families, and I consoled myself with the recollection that it was not the only one we had with us. the bones of the buffaloe and their excrement of an old date are to be met with in every part of this valley but we have long since lost all hope of meeting with that animal in these mountains. we met with great quantities of currants today, two species of which were red, others yellow, deep perple and black; also black goosberries and serviceberries now ripe and in great perfection. we feasted sumptuously on our wild fruits, particularly the yellow currant and the deep perple serviceberries, which I found to be excellent. the serviceberry grows on a small bush and differs from ours only in colour size and superior excellence of it's flavour. it is somewhat larger than ours. on our way we saw an abundance of deer [and] Antelopes, of the former we killed 2. we also saw many tracks of the Elk and bear. no recent appearance of Indians. the Indians in this part of the country appear to construct their lodges with the willow boughs and brush; they are small of a conic figure and have a small aperture on one side through which they enter. we continued our rout up this valley on the Lar^{d} side of the river untill sunset, at which time we encamped on the Lar^{d} bank of the river having traveled 24 miles. we had brought with us a good stock of venison of which we eat a hearty supper. I feel myself perfectly recovered of my indisposition, and do not doubt being able to pursue my rout tomorrow with the same comfort I have done today. we saw some very large beaver dams today in the bottoms of the river several of which wer five feet high and overflowed several acres of land; these dams are formed of willow brush mud and gravel and are so closely interwoven that they resist the water perfectly. the base of this work is thick and rises nearly perpendicularly on the lower side while the upper side or that within the dam is gently sloped. the brush appear to be laid in no regular order yet acquires a strength by the irregularity with which they are placed by the beaver that it would puzzle the engenuity of man to give them.

Cap^{t} Clark continued his rout early this morning. the rapidity of the current was such that his progress was slow, in short it required the utmost exertion of the men to get on, nor could they resist this current by any other means than that of the cord and pole. in the course of the day they passed some villages of burrowing squirrels, saw a number of beaver dams and the inhabitants of them, many young ducks both of the Duckanmallard and the redheaded fishing duck, gees, several rattle snakes, black woodpeckers, and a large gang of Elk; they found the river much crouded with island[s] both large and small and passed a small creek on Star^{d} side which we called *birth* Creek.[1] Cap^{t} Clark discovers a tumor rising on the inner side of his ankle this evening which was painfull to him (*boils*). they incamped in a level bottom on the Lar^{d} side.

Courses and distances travelled by Cap^{t} Clark August 2nd 1805.

S. 80° W.	¾	to a Star^{d} bend
S. 30° W.	¼	to a Lar^{d} bend
West.	¼	to a bayou in the Lar^{d} bend
North	½	to a Star^{d} bend passing a riffle and 2 small Isl^{ds}
S. 30° W.	¾	to a Lar^{d} bend passing an Island
N. 45° W.	½	to a Star^{d} bend passing a Ba[y]ou Lar^{d} side
West	2.	to an Island, passing two points on the Lar^{d} side. 2 Islands and several bayous on Lar^{d} the valley from 6 to 10 M^{ls} wide
South –	1 ⅛	to a Lar^{d} bend
N. 45° W.	¼	to a Star^{d} bend being the Lar^{d} side of an Isl^{d}
S. 40° W.	⅛	along the Star^{d} bend of the Island.
S. 60° E.	¼	to a Lar^{d} bend passing the upper point of the Island. on the Star^{d} side.
S. 45° W.	½	in the Lar^{d} bend
N. 10° W.	¾	in the Star^{d} bend passing a bayou
N. 80° W.	¼	to a Star^{d} bend, being the Lar^{d} side of an Island
S. 30° W.	¾	to a Lar^{d} bend passing the Island.
North	¼	to a Star^{d} bend.
S. 45° W.	1	to the mouths of three bayous in a Star^{d} bend
S. 30° E.	½	to a Lar^{d} bend
S. 50° W.	⅛	in the Lar^{d} bend.
N. 20° W.	½	to a bayou in a Star^{d} bend.

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[1] Named thus for Clark's birthday (Aug. 1); it is now White Tail Deer Creek, and on it is a place called Whitehall, a station of the Northern Pacific line. — Ed.

S. 20° W.	½	to a Lar^{d} bend
N. 45° W.	¼	to a low bluff in a Star^{d} bend.
S. 45° W	⅛	along the Lar^{d} bend passing a bayou on Star^{d} side
S. 20° E.	½	to a Lar^{d} bend
S. 50° W.	¼	to the lower point of an Island
West	¼	to a Lar^{d} bend at a bayou, passing a bayou on the Star^{d} side and the Island.
S. 60° E.	½	to a Lar^{d} bend passing an Island.
S. 45° W.	¼	to a bayou on the Star^{d} side in a bend.
South	¼	to a lar^{d} bend.
S. 60° W.	½	to a Star^{d} bend, at the entrance of a bayou, [*Birth Cr.*] which is rapid and 30 y^{ds} wide
S. 45° E.	⅛	along the Star^{d} bend
East.	⅛	to a Lar^{d} bend
South	½	to the mouth of a bayou in a Star^{d} bend
S. 70° W.	¾	to a Star^{d} bend
South	¼	to a high bottom in a Star^{d} bend
S. 70° E.	½	to a Lar^{d} bend, where they encamped for the night in a smooth plain.
Miles	17	

[Clark:] *August 2^{d} nd. Friday 1805*

a fine day set out early the river has much the Same kind of banks Chanel Current &c. as it had in the last Vallie, I walked out this morning on Shore & Saw Several rattle Snakes in the plain, the wind from the NW we proceeded on with great dificuelty from the rapidity of the current & rapids, ab^{t} 15 miles and Encamped on the Lar^{d} Side, saw a large Gangue of Elk at Sunset to the SW. passed a Small Creek on the Star^{d} Side called birth Creek and maney large and Small Islands. Saw a number of young Ducks as we have also Seen everry Day, Some geese. I saw Black woodpeckers. I have either got my foot bitten by Some poisonous insect or a tumer is riseing on the inner bone of my ankle which is painfull

[Lewis—apparently the first draft:] *August the 3rd 1805—*

Set out this morning at sunrise and continued our rout through the valley on the Lar^{d} side of the river. at eleven A. M. Drewyer killed a doe and we halted and took breakfast.

the mountains continue high on either side of the valley, and are but skantely supplyed with timber; small pine appears to be the prevalent growth. there is no timber in the valley except a small quantity of the narrow leafed cottonwood on the verge of the river. the underwood consists of the narrowleafed or small willow, honeysuckle rosebushes, courant, goosbury and service bury bushes allso a small quantity of a species of dwarf burch the leaf of which, oval, deep green, finely indented and very small. we encamped this evening after sunset having traveled by estimate 23 miles. from the width and appearance of the valley at this place I concieved that the river forked not far above me and therefore resolved the next morning to examine the adjacent country more minutely.

[Lewis — apparently the second draft:] *Saturday August* 3rd. 1805.

Set out early this morning, or before sunrise; still continued our march through the level valley on the lard. side of the river. the valley much as yesterday only reather wider; I think it 12 Miles wide, tho' the plains near the mountains rise higher and are more broken with some scattering pine near the mountain. in the leaveler parts of the plain and river bottoms which are very extensive there is no timber except a scant proportion of cottonwood near the river. the under wood consists of the narrow leafed or small willow, the small honeysuckle, rosebushes, currant, serviceberry, and goosbery bushes; also a small species of berch in but small quantities, the leaf of which is oval, finely indented, small and of a deep green colour. the stem is simple ascending and branching, and seldom rises higher than 10 or 12 feet. the Mountains continue high on either side of the valley, and are but scantily supplyed with timber; small pine apears to be the prevalent growth; it is of the pi[t]ch kind, with a short leaf. at 11 A.M. Drewyer killed a doe and we halted about 2 hours and breakfasted, and then continued our rout untill night without halting, when we arrived at the river in a level bottom which appeared to spread to greater extent than usual. from the appearance of the timber I supposed that the river forked above us and resolved to examine this part of the river minutely tomorrow. this evening we passed through a high plain for about 8 miles covered with prickley pears and bearded grass, tho' we found this even better walking than the wide bottoms of the river, which we passed in the evening; these altho' apparently level, from some cause which I know not, were formed into meriads of deep holes as if rooted up by hogs; these the grass covered so thick that it was impossible to walk without the risk of falling down at every step. some parts of these bottoms also possess excellent terf or peat, I beleive of many feet deep. the mineral salts also frequently mentioned on the Missouri we saw this evening in these uneven bottoms. we saw many deer, Antelopes, ducks, gees, some beaver and great appearance of their work. also a small bird and the Curlooe as usual. we encamped on the river bank on Lar^d side having traveled by estimate 23 Miles. The fish of this part of the river are trout and a species of scale fish of a while [white] colour and a remarkable small long mouth which one of our men inform us are the same with the species called in the Eastern states *bottlenose*. the snowey region of the mountains and for some distance below has no timber or herbage of any kind; the timber is confined to the lower and middle regions. Cap^t Clark set out this morning as usual. he walked on shore a small distance this morning and killed a deer. in the course of his walk he saw a track which he supposed to be that of an Indian from the circumstance of the large toes turning inward, he pursued the track and found that the person had ascended a point of a hill from which his camp of the last evening was visible; this circumstance also confirmed the beleif of it's being an Indian who had thus discovered them and ran off. they found the river as usual much crouded with islands, the currant more rapid & much more shallow than usual. in many places they were obliged to double man the canoes and drag them over the stone and gravel. this morning they passed a small creek on Star^d at the entrance of which Reubin Fields killed a large Panther. we called the creek after that animal Panther Creek.[1] they also passed a handsome little stream on Lar^d which is form[ed] of several large springs which rise in the bottoms and along the base of the mountains with some little rivulets from the melting snows. the beaver have formed many large dams on this stream. they saw some deer Antelopes and the common birds of the country. in the evening they passed a very bad rappid where the bed of the river is formed ent[i]rely of solid rock and encamped on an island just above. the Panther which Fields killed measured seven and ½ feet from the nose to the extremity of the tail. it is precisely the same animal common to the western part of our country. the men wer compelled to be a great proportion of their time in the water today; they have had a severe days labour and are much fortiegued.

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[1] Now Pipestone Creek. Just across the range from the headwaters of this creek lies Butte, the greatest mining camp in the world. Since 1882 the Butte mines have

Courses and distances as traveled by Cap^{t} C. and party August 3rd 1805.

South		½	in a Lar^{d} bend.
West		1¼	to a Star^{d} bend.
S.	45° W.	½	to the entrance of a small creek in a Star^{d} bend this stream heads in the mountains at a little distance. we called it Panther Creek.
S.	20° W.	½	in the Star^{d} bend.
S.	80° E.	1¼	to the lower point of an island.
South		¼	to a point of the Island on it's star^{d} side
South.	30° E.	¼	to a bayou in the Island
South		1½	to the upper point of the island having passed two point[s] and a Clift on Star^{d} and a point on Lar^{d}
S.	10° W.	4.	On a direct line to the entrance of a small creek on Lar^{d} it being the dranes of a snowey mountain in view. river passing under this mountain leaving the bottoms to the Star^{d} and has several short bends in this course.
S.	25° W.	1	to a small run in a Lar^{d} bend
S.	60° W.	1.	to a low stoney bluff in a Star^{d} bend, opposite an island having passed one other.
S.	20° W.	1.	to the lower point of an Island Lar^{d} passing one other, and a narrow rocky channel under a bluf. encamped on this island for the evening.
Miles		13	

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produced considerably more than $500,000,000—in the ratio, approximately, of gold 3, silver 35, and copper 60 per cent; and they now furnish about 25 per cent of the copper output of the world. Most of these ores are treated at Anaconda (a little west of Butte), the smelters at which have a capacity of nearly 10,000 tons of crude ore daily. — O. D. WHEELER.

[Clark:] *August 3rd Saturday 1805*

a fine morning wind from the NE I walked on Shore & killed a Deer, in my walk I saw a fresh track which I took to be an Indian from the Shape of the foot as the toes turned in, I think it probable that this Indian Spied our fires and Came to a Situation to view us from the top of a Small knob on the Lard Side. the river more rapid and Sholey than yesterday one man R. F. killed a large *Panthor* on the Shore We are oblige to haul over the Sholes [the] Canoes in maney places where the Islands are noumerous and bottom Sholey, in the evening the river more rapid and Sholey we encamped on an Island av[b]ove a part of the river which passed thro a a rockey bed enclosed on both sides with thick willow Current & red buries &c. &c. passed a bold Stream which heads in the mountains to our right and the drean of the monting Snow in the Montn on that side ar in View. at 4 oClock passed a bold Stream which falls from a Mountn in three Channels to our left, the Greater portion of the Snow on this mountain is melted, but little remaining near us Some Deer Elk & antelopes & Bear in the bottoms. but fiew trees and they Small the Mountains on our left Contain pine those on our right but verry partially Supplied and what pine & cedar it has is on the Lower region, no wood being near the Snow. great numbers of Beaver Otter &c. Some fish, trout & bottle nose. Birds as usial. Geese young Ducks & Curlows

[Lewis — apparently the first draft:] *August 4th 1805*

Set out very early this morning and steered S.E. by E. about 4 miles when we passed a bould runing creek about 12 yards wide the water could and remarkably clear, we then changed our course to S. E. passing obliquely across a valley which boar nearly E leaving the valley which we had pursued for the 2 precedeing days. at the distance of 3 miles we passed a handsome little river which passes through this valley; it is about 30 yards wide affords a considerable quantity of water and I believe it may be navigated some miles.

I then changed my rout to S. W. passed a high plain which lyes between the vallies and returned to the S. valley, in passing which I fell in with a river about 45 yards wide which I waideg [waded] and then continued my rout down to it's junction with the river just mentioned, and from thence to the entrance of the creek which falls in about 2 miles below; still continuing my rout down this stream about three miles further and about 2 M. below our encampment of the last evening this river forms a junction with a river 50 yards wide which comes from the N. W. and falling into the S. valley runs parrallel with the middle fork about 12 miles. this is a bould rappid & clear stream it's bed so broken and obstructed by gravel bars and Islands that it appeared to me impossible to navigate it with safety. the middle fork is gentle and possesses about $2/3^{ds}$ as much water as this rappid stream, it's cours so far as I can observe it is about S. W. and it appears to be navigable; its water is much warmer than that of the rappid fork and somewhat turbid, from which I concluded that it had it's source at a greater distance in the mountains and passed through an opener country than the other. under this impression I wrote a note to Capt. Clark recommending his taking the middle fork provided he should arrive at this place before my return which I expect will be the day after tomorrow. the note I left on a pole at the forks of the river and having refreshed ourselves and eat heartily of some venison we killed this morning I continued my rout up the Star^d side of the N. W. fork, determining to pursue it untill 12 OC. the next day and then pass over to the middle fork and return to their junction or untill I met Capt. Clark. we encamped this evening near the point where the river leaves the valley and enters the mountains, having traveled about 20. Miles.

[Lewis—apparently the second draft:] *Sunday August* 4th 1805.

Set out very early this morning and Steered S. E. by E. 4 M. when we pased a bold runing Creek 12 y^{ds} wide, the water of which was clear and very cold. it appears to be formed by four dranes from the snowey mountains to our left. after passing this creek we changed our direction to S. E. passing obliquely across a valley which boar E. leaving the valley we had pursued for the two preceeding days. at the distance of 3 M^s we passed a handsome little river which meanders through this valley; it is about 30 y^{ds} wide, affords a considerable quantity of water and appears as if it might be navigated some miles. the currant is not rapid nor the water very clear; the banks are low and the bed formed of stone and gravel. I now changed my rout to S. W. passed a high plain which lies betwen the valleies and returned to the South valley, in passing which I fell in with a river about 45 y^{ds} wide gravley bottom gentle currant waist deep and water of a whitish blue tinge. this stream we waded and continued our rout down it to the entrance of the river just mentioned about ¾ of a mile. still continuing down we passed the entrance of the creek about 2 miles lower down; and at the distance of three miles further arrived at it's junction with a river 50 y^{ds} wide which Comes from the S.W. and falling into the South valley runs parallel with the middle fork about 12 miles before it forms a junction. I now found that our encampment of the last evening was about 1½ miles above the entrance of this large river on Star^d[1] this is a bold rappid and Clear Stream, it's bed so much broken and obstructed by gravley bars and it's waters so much subdivided by Islands that it appears to me utterly impossible to navigate it with safety. the middle fork is gentle and possesses about ⅔^{rds} as much water as this stream. it's course so far as I can observe it is about S.W., and from the opening of the valley I beleive it still bears more to the West above. it may be safely navigated. it's water is much warmer then the rapid fork and it's water more turbed; from which I conjecture that it has it's sources at a greater distance in the mountains and passes through an opener country than the other. under this impression I wrote a note to Capt Clark, recommending his taking the middle fork p[r]ovided he should arrive at this place before my return, which I expect will be the day after tomorrow. this note I left on a pole at the forks of the river, and having refreshed ourselves and eat heartily of some venison which we killed this morning we continued our rout up the rapid fork on the Star^{d} side, resolving to pursue this stream untill noon to-morrow and then pass over to the middle fork and come down it to their junction or untill I meet Capt Clark. I have seen no recent Indian sign (*Qu*) in the course of my rout as yet. Charbono complains much of his leg, and is the cause of considerable detention to us. we encamped on the river bank near the place at which it leaves the valley and enters the mountain having traveled about 23 miles. we saw some Antelopes deer Crains, gees, and ducks of the two species common to this country. the summer duck has ceased to appear, nor do I beleive it is an inhabitant of this part of the country. the timber &c is as heretofore tho' there is more in this valley on the rapid fork than we have seen in the same extent on the river since we entered this valley. the Indians appear on some parts of the river to have distroyed a great proportion of the little timber which there is by seting fire to the bottoms. This morning Cap^{t} Clark set out at sunrise, and sent two hunters ahead to kill some meat. at 8 A.M. he arrived at my camp of the 2^{cd} ins^{t} where he breakfasted; here he found a note which I had left for him at that place informing him of the occurences of my rout &c. the river continued to be crouded with Islands, rapid and shoaly. these shoals or riffles succeeded each other every 3 or four hundred yards; at those places they are obliged to drag the canoes over the stone there not being water enough to float them, and betwen the riffles the current is so strong that they are compelled to have c[r]ecourse to the cord; and being unable to walk on the shore for the brush wade in the river along the shore and hawl them by the cord; this has increased the pain and labour extreemly; their feet soon get tender and soar by wading and walking over the stones. these are also so slipry that they frequently get severe falls. being constantly wet soon makes them feble also. their hunters killed 2 deer today and some gees and ducks wer killed by those who navigated the canoes. they saw deer antelopes Crains beaver Otter &c. Cap^{t} Clark's ancle became so painfull to him that he was unable to walk. This evening they encamped on the Star^{d} side in a bottom of cottonwood timber, all much fatiegued.

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[1] This is the stream which the explorers, two days later, named Wisdom River. — ED.

Courses and distances traveled by Cap^{t} Clark and party. August 4th 1805.

S. 45° W.	5.	on a direct course to a Lar^{d} bend passing 4 bends on the Lar^{d} side and several bayous on either side.
S. 20° W.	4.	With the river to a bluff on the Lar^{d} side, passing 3 bends on the Star^{d} and two small Islands and 2 Bayous on Star^{d} side.
S. 60° W.	6.	with the river to an island, passing six circular bends on the Star^{d} and several small bayous. encamped on star^{d} side in a bottom covered with cottonwood.
Miles	15.	

[Clark:]

August 4th Sunday. 1805

a fine morning cool proceeded on verry early and Brackfast at the Camp Cap^{t} Lewis left yesterday morning, at this Camp he left a note informing that he discovered no fresh Sign of Indians &c. The river continued to be crouded with Islands Sholey rapid & clear, I could not walk on Shore to day as my ankle was sore from a tumer on that part. the method we are compelled to take to get on is fatigueing & laborious in the extreen, haul the Canoes over the rapids, which Suckceed each other every two or three hundred yards and between the water rapid oblige to tow & walke on stones the whole day except when we have poleing, men wet all day sore feet &c. &c. Murcury at Sun rise 49 a. o,

[Lewis:]

Monday August 5th 1805.

As Charbono complained of being unable to march far today I ordered him and Serg^{t} Gass to pass the rappid river near our camp and proceed at their leasure through the level bottom to a point of high timber about seven miles distant on the middle fork which was in view; I gave them my pack that of Drewyer and the meat which we had, directing them to remain at that place untill we joined them. I took Drewyer with me and continued my rout up the star^d side of the river about 4 miles and then waded it; found it so rapid and shallow that it was impossible to navigate it. continued up it on the Lar^d side about 1½ miles further when the mountains put in close on both sides and arrose to great hight, partially covered with snow. from hence the course of the river was to the East of North. I took the advantage of a high projecting spur of the mountain which with some difficulty we ascended to it's summit in about half an hour. from this eminance I had a pleasing view of the valley through which I had passed many miles below and the continuation of the middle fork through the valley equally wide above me to the distance of about 20 miles when that also appeared to enter the mountains and disappeared to my view; however the mountains which termineate the valley in this direction appeared much lower than those up either of the other forks. on the rapid fork they appeared still to rise the one range towering above another as far as I could perceive them. the middle fork as I suspected dose bear considerably to the West of South and the gap formed by it in the mountains after the valley terminates is in the same direction. under these circumstances I did not hesitate in beleiving the middle fork the most proper for us to ascend. about South from me, the middle fork approached within about 5 miles. I resolved to pass across the plains to it and return to Gass and Charbono, accordingly we set out and decended the mountain among some steep and difficult precipices of rocks. here Drewyer missed his step and had a very dangerous fall, he sprained one of his fingers and hirt his leg very much. in fifteen or 20 minutes he was able to proceed and we continued our rout to the river where we had desighned to interscept it. I quenched my thirst and rested a few minutes examined the river and found it still very navigable. an old indian road very large and plain leads up this fork, but I could see no tracks except those of horses which appeared to have passed early in the spring. as the river mad[e] a great bend to the South East we again ascended the high plain and steered our course as streight as we could to the point where I had directed Gass and Sharbono to remain. we passed the plain regained the bottom and struck the river about 3 miles above them; by this time it was perfectly dark & we hooped but could hear no tidings of them. we had struck the river at the point of timber to which I had directed them, but [they] having mistaken a point of woods lower down, had halted short of the place. we continued our rout after dark down the bottom through thick brush of the pulppy leafed thorn and prickly pears for about 2 hours when we arrived at their camp. they had a small quantity of meat left which Drewyer and myself eat it being the first we had taisted today. we had traveled about 25 miles. I soon laid down and slept very soundly untill morning. I saw no deer today nor any game except a few Antelopes which were very shy. the soil of the plains is a light yellow clay very meager and intermixed with a large proportion of gravel, producing nothing except the twisted or bearded grass, sedge and prickly pears. the dryer parts of the bottoms are also much more indifferent in point of soil to those below and are covered with the southernwood pulpy leafed thorn and prickley pears with but little grass. the moist parts are fertile and covered with fine grass and sand rushes.

This morning Capt. Clark set out at sunrise and dispatched Joseph & Reubin Fields to hunt. they killed two deer on one of which the party breakfasted. the river today they found streighter and more rapid even than yesterday, and the labour and difficulty of the navigation was proportionably increased, they therefore proceeded but slowly and with great pain as the men had become very languid from working in the water and many of their feet swolen and so painfull that they could scarcely walk. at 4. P. M. they arrived at the confluence of the two rivers where I had left the note. this note had unfortunately been placed on a green pole which the beaver had cut and carried off together with the note; the possibility of such an occurrence never on[c]e occurred to me when I placed it on the green pole. this accedent deprived Capt. Clark of any information with ri[s]pect to the country and supposing that the rapid fork was most in the direction which it was proper we should pursue, or West, he took that stream and asscended it with much difficulty about a mile and encamped on an island that had been lately overflown and was yet damp; they were therefore compelled to make beds of brush to keep themselves out of the mud. in ascending this stream for about a quarter of a mile it scattered in such a maner that they were obliged to cut a passage through the willow brush which leant over the little channels and united their tops. Cap^t Clarks ankle is extreemly painfull to him this evening; the tumor has not yet mature, he has a slight fever. The men were so much fortiegued today that they wished much that navigation was at an end that they might go by land.

Courses and distances traveled by Cap^t Clark and party August 5th 1805.

S. 45° E.	½	to a Lar^d bend passing a bayou on Lar^d side
S. 15° W.	½	to a Star^d bend passing an island.
South –	1	to a Lar^d bend passing a small Island, and a bayoue on the Star^d side.
S. 45° W.	¼	to a Star^d bend passing an island.
S. 30° W.	2.	to a low clift at the mouth of a bayou on Star^d side passing three bad rappids in this course
S. 60° E.	½	to a Lar^d bend passing an Island Star^d side.
S. 30° W.	½	to a bluff in a Star^d bend
South	¼	in the Star^d bend passing a bad rapid.
S. 45° E.	¼	to a Lar^d bend.
South	½	to a bluff in a Star^d bend.
South 45° E.	½	to a Lar^d bend.
S. 15° W.	¼	to a Star^d bend under a bluff.
East	½	to a Lar^d bend passing a bayou on Star^d side.
S. 5° W.	¼	to a bayou in a Lar^d bend.
S. 45° W.	½	to a Star^d bend passing an island.
West	¼	to a bayou in a Star^d bend.
S. 45° E.	¼	to a Lar^d bend passing an island
South	½	to the forks. these forks are nearly of the same size
Miles.	9.¼	tho' the N.W. fork possesses the most water at this time and is infinitely the most rapid. ascended the last one mile on a course of S 30 W. and encamped on an Island.

[Clark:] *August 5th Monday 1805*

a cold clear morning the wind from the S. E. the river Streight & much more rapid than yesterday, I sent out Jo. & R. Fields to kill some meat they killed two Deer & we brackfast on one of them and proceeded on with great dificuelity from the rapidity of the Current, and [in]numerable rapids we had to encounter. at 4 oClock PM Murcery 49 ab. 0, passed the mouth of principal fork which falls in on the Lard. Side, this fork is about the size of the Stard. one less water reather not to rapid, its Course as far as can be seen is S.E. & appear to pass through between two mountains, the NW. fork being the one most in our course i. e. S. 25 W. as far as I can See, deturmind me to take this fork as the principal and the one most proper the S E fork is of a Greenish Colour & contains but little timber. The SW fork contains more timber than is below for some distance, we assended this fork about one mile and Encamped on an Island which had been laterly overflown & was wet we raised our bead on bushes, we passed a part of the river above the forks which was divided and Scattered thro' the willows in such a manner as to render it dificuelt to pass through for a ¼ of a mile, we were oblige to Cut our way thro' the willows. Men much fatigued from their excessive labours in hauling the Canoes over the rapids &c. verry weak being in the water all day. my foot verry painfull

[Lewis:] *Tuesday August 6th 1805.*

We set out this morning very early on our return to the forks. having nothing to eat I se[n]t Drewyer to the woodlands to my left in order to kill a deer, sent Sergt. Gass to the right with orders to keep sufficiently near to discover Capt. C. and the party should they be on their way up that stream, and with Sharbono I directed my course to the main forks through the bottom directing the others to meet us there. about five miles above the forks I hea[r]d the hooping of the party to my left and changed my rout towards them; on my arrival found that they had taken the rapid fork and learnt from Capt.

Clark that he had not found the note which I had left for him at that place and the reasons which had induced him to ascend this stream. it was easeist & more in our direction, and ap^{d}. to contain as much water. he had however previously to my comeing up with him, met Drewyer who informed him of the state of the two rivers and was on his return. one of their canoes had just overset and all the baggage wet, the medecine box among other articles and several articles lost a shot pouch and horn with all the implements for one rifle lost and never recovered. I walked down to the point where I waited their return. on their arrival found that two other canoes had filled with water and wet their cargoes completely. Whitehouse had been thrown out of one of the canoes as she swing in a rapid current and the canoe had rubed him and pressed him to the bottom as she passed over him and had the water been 2 inches shallower must inevitably have crushed him to death. our parched meal, corn, Indian preasents, and a great part of our most valuable stores were wet and much damaged on this ocasion. to examine, dry and arrange our stores was the first object; we therefore passed over to the lar^{d}. side opposite to the entrance of the rapid fork where there was a large gravly bar that answered our purposes; wood was also convenient and plenty. here we fixed our camp, and unloaded all our canoes and opened and exposed to dry such articles as had been wet. a part of the load of each canoe consisted of the leaden canestirs of powder which were not in least injured, tho' some of them had remained upwards of an hour under water. about 20 lb^{s}. of powder which we had in a tight Keg or at l[e]ast one which we thought sufficiently so got wet and intirely spoiled. this would have been the case with the other had it not have been for the expedient which I had fallen on of securing the powder by means of the lead having the latter formed into canesters which were filled with the necessary proportion of po[w]der to discharge the lead when used, and those canesters well secured with corks and wax. in this country the air is so pure and dry that any vessel however well seasoned the timber may be will give way or shrink unless it is kept full of some liquid. we found that three deer skins which we had left at a considerable hight on a tree were taken off which we supposed had been done by a panther. we sent out some men to hunt this evening, they killed 3 deer and four Elk which gave us a plentifull supply om[f] meat once more. Shannon had been dispatched up the rapid fork this morning to hunt, by Capt Clark before he met with Drewyer or learnt his mistake in the rivers. when he returned he sent Drewyer in surch of him, but he rejoined us this evening and reported that he had been several miles up the river and could find nothing of him. we had the trumpet sounded and fired several guns but he did not join us this evening. I am fearfull he is lost again. this is the same man who was seperated from us 15 days as we came up the Missouri and subsisted 9 days of that time on grapes only. Whitehouse is in much pain this evening with the injury one of his legs sustained from the canoe today at the time it upset and swing over him. Capt Clarks ankle is also very painfull to him. we should have given the party a days rest some where near this place had not this accedent happened, as I had determined to take some observations to fix the Latitude and longitude of these forks. our merchandize medecine &c are not sufficiently dry this evening we covered them securely for the evening. Capt Clark had ascended the river about 9 miles from this place on a course of S 30°W. before he met with Drewyer.

we beleive that the N.W. or rapid fork is the dane (*drain*) of the melting snows of the mountains, and that it is not as long as the middle fork and dose not at all seasons of the year supply any thing like as much water as the other and that about this season it rises to it's greatest hight. this last appears from the apparent bed of the river which is now overflown and the water in many plases spreads through old channels which have their bottoms covered with grass that has grown this season and is such as appears on the parts of the bottom not innundated. we therefore determined that the middle fork was that which ought of right to bear the name we had given to the lower portion or *River Jefferson*, and called the bold rapid an[d] clear stream *Wisdom*,[1] and the more mild and placid one which flows in from the S.E. *Philanthrophy*, in commemoration of two of those cardinal virtues, which have so eminently marked that deservedly selibrated character through life.

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[1] Wisdom River is now called the Big Hole. Valleys among mountains are commonly called "holes." Philanthropy River is now known as Stinking Water. — ED.

[Clark:] *August 6th Tuesday 1805*

a Clear morning Cool wind from the SW we proceeded on with much dificuelty and fatigue over rapids & Stones; river about 40 or 50 yards wide much divided by Islands and narrow Bayoes to a low bluff on the Stard Side & Brackfast, dureing the time of Brackfast Drewyer Came to me from Capt Lewis and informed me that they had explored both forks for 30 or 40 miles & that the one we were assending was impracti[c]able much further up & turned imediately to the North, The middle fork he reported was gintle and after a Short distance turned to the S. W. and that all the Indian roades leades up the middle fork. this report deturmind me to take the middle fork, accordingly Droped down to the forks where I met with Capt Lewis & party, Capt Lewis had left a Letter on a pole in the forks informing me what he had discovered & th[e] course of the rivers &c. this letter was Cut down by the [beaver] as it was on a green pole & Carried off. Three Skins which was left on a tree was taken off by the Panthers or wolves. In decending to the Point one Can[o]e Struck & turned on a rapid & Sunk, and wet every thing which was in her, this misfortune obliged us to halt at the forks and dry those articles, one other Canoe nearly turning over, filled half full of water & wet our medison & Some goods Corn &c. Several hunters out to day & killed a young Elk, antilope, & 3 Deer, one man Shannon did not return to night. The evening Cool my anckle much wors than it has been. this evening a Violent wind from the N. W accompanied with rain which lasted half an hour wind NW

[Lewis:] *Wednesday August 7th 1805*

The morning being fair we spread our stores to dry at an early hour. Dispatched Reubin Fields in surch of Shannon.

Our stores were now so much exhausted that we found we could proceed with one canoe less, we therefore drew out one of them into a thicket of brush and secured her in such manner that the water could not take her off should the river rise to the hight where she is. The creek which falls in above us we called *turf creek* from the cercu[m]stance of it's bottoms being composed of excellent turf. my air gun was out of order and her sights had been removed by some accedent I put her in order and regulated her. she shot again as well as she ever did. The clouds last night prevented my taking any lunar observations this day I took Equal Altitudes of the ⊙ with Sextant.

	h	m	s		h	m	s	Altitude by Sex^{t} at the time of observation.
A.M.	8.	20.	28. 5	P.M.	4.	38.	3	° ' "
	".	21.	54.		".	39.	40	62. 9. 45.
	".	23.	30.		".	41.	8	

Chronometer too [blank space in MS.] on Mean time [blank space in MS.] h m s

	°	'	"
Observed Meridian Alt^{d} of ⊙$^{'s}$ L.L. with Octant by the back observation	63.	5.	–
Latitude deduced from this observation N.	45.	2.	43 8

At one oclock all our baggage was dry we therefore packed it up reloaded the canoes and the party proceeded with Cap^{t} Clark up Jefferson's river. I remained with Serg^{t} Gass to complete the observation of equal altitudes and joined them in the evening at their camp on the Lar^{d} side just above the entance of turf creek. we had a shower of rain w[h]ich continued about 40 minutes attended with thunder and lightning. this shower wet me perfectly before I reached the camp. the clouds continued during the night in such manner that I was unable to obtain any lunar observations. This evening Drewyer brought in a deer which he had killed. we have not heard any thing from Shannon yet, we expect that he has pursued Wisdom river upwards for som[e] distance probably killed some heavy animal and is waiting our arrival. the large biteing fly or hare fly as they [are] sometimes called are very troublesome to us. I observe two kinds of them a large black species and a small brown species with a green head. the musquetoes are not as troublesome as they were below, but are still in considerable quantities. the eye knats have disappeared. the green or blowing flies are still in swarms.

Courses and distances August 7th 1805.

S. 45° E. to the entrance of turf Creek 12 yds. wide which discharges
itself on Lard. side passing several bends both on Stard. and
Lard. and several small bayous on either side. on the
Miles [1] course of the R. about 7 M.

☞ the courses from the entrance of Wisdom river to the forks of Jefferson's river are taken directly to the objects mentioned and the distance set down is that by land on a direct line between the points;[1] the estimated distances by water is also added in the body of the remarks on each course.

[Clark:] *August 7th Wednesday 1805*

a fine morning put out our Stores &c. to dry & took equal altitudes with the Sextant, as our Store[s] were a little exorsted and one Canoe became unnecessary deturmind to leave one. we Hauled her up in the bushes on the lower Side of the main fork & fastened her So that the water could not flote her off. The Countrey in this quarter is as follows i, e a Vallie of 5 or 6 miles wide Inclosed between two high Mountains, the bottom rich Some Small timber on the Islands & bushes on the edges of the river Some *Bogs* & verry good *turfs* in different places in the vallie, Some scattering Pine & cedar on the mountains in places, other Parts nacked [naked] except grass and Stone The Lattitude of the Mouth of *Wisdom River* is *45° 2' 21".6* North, we proceeded up the Main Middle or S.E. fork, passed a[nd] Camped on the Lard. Side above the mouth of a bold running Stream 12 yards wide, which we call *turf* Creek from the number of bogs & quan[ti]ty of turf in its waters.

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[1] Courses and distances up to this point have been estimated on the river with all its bends and turns; they are often from two to three times as far as the direct distance by land. — Ed.

this Creek runs thro a open Plain for Several miles, takeing its rise in a high mountain to the N.E. The river Jefferson above Wisdom is gentle Crooked and about 40 yards wide, Containing but little timber, Some few Cotton willow Willow & Birch, and the Srubs common to the countrey and before mentioned at 5 oClock a thunder Storm from the N.W. accompanied with rain which lasted about 40 minits. despatched R Fields to hunt Shannon, who was out hunt^{g} on Wisdom river at the time I returned down that Stream, and has made o[n] up the river expecting us to follow him up that river. one Deer killed this evening. all those Streams Contain emence number of Beaver orter Musk-rats &c.

[Lewis:] *Thursday August* 8th. 1805.

We had a heavy dew this morning. as one canoe had been left we had now more ha[n]ds to spear for the chase; game being scarce it requires more hunters to supply us. we therefore dispatched four this morning. we set out at sunrise and continued our rout up the river which we find much more gentle and deep than below the entrance of Wisdom river it is from 35 to 45 yards wide very crooked many short bends constituteing large and general bends; insomuch that altho' we travel briskly and a considerable distance yet it takes us only a few miles on our general course or rout. there is but very little timber on this fork principally the under brush frequently mentioned. I observe a considerable quantity of the buffaloe clover in the bottoms. the sunflower, flax, green swoard, thistle and several species of the rye grass some of which rise to the hight of 3 or 4 feet. there is a grass also with a soft smooth leaf that bears it's seeds very much like the timothy but it dose not grow very luxouriant or appear as if it would answer so well as the common timothy for meadows. I preserved some of it's seeds which are now ripe, thinking perhaps it might answer better if cultivated, at all events is at least worth the experiment. it rises about 3 feet high. on a direct line about 2 miles above our encampment of this morning we passed the entrance of Philanthrophy River which discharges itself by 2 channels a small distance assunder. this river from it's size and S. Eastwardly course no doubt heads with Madisons river in the snowey mountains visible in that direction. at Noon Reubin Fields arrived and reported that he had been up Wisdom river some miles above where it entered the mountain and could find nothing of Shannon, he had killed a deer and an Antelope. great quantity of beaver Otter and musk-rats in these rivers. two of the hunters we sent out this morning returned at noon had killed each a deer and an Antelope. we use the seting poles today almost altogether. we encamped on the Lard side where there was but little timber were obliged to use willow brush for fuel; the rosebushes and bryers were very thick. the hunters brought in another deer this evening. t[h]e tumor on Capt. Clarks ankle has discharged a considerable quantity of matter but is still much swolen and inflamed and gives him considerable pain. saw a number of Gees ducks and some Crains today. the former begin to fly. the evening again proved cloudy much to my mortification and prevented my making any lunar observations. the Indian woman recognized the point of a high plain to our right which she informed us was not very distant from the summer retreat of her nation on a river beyond the mountains which runs to the west. this hill she says her nation calls the beaver's head from a conceived re[se]mblance of it's figure to the head of that animal.[1] she assures us that we shall either find her people on this river or on the river immediately west of it's source; which from it's present size cannot be very distant. as it is now all important with us to meet with those people as soon as possible I determined to proceed tomorrow with a small party to the source of the principal stream of this river and pass the mountains to the Columbia; and down that river untill I found the Indians; in short it is my resolusion to find them or some others, who have horses if it should cause me a trip of one month. for without horses we shall be obliged to leave a great part of our stores, of which, it appears to me that we have a stock already sufficiently small for the length of the voyage before us.

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[1] The Beaverhead lies about twelve miles south from Twin Bridges and eighteen miles north (by road) from Dillon, Mont.; but it is generally known as the Point of Rocks. Less than thirty miles from it is the "Rattlesnake Cliff" of Lewis and Clark, which in shape bears as striking a resemblance to a beaver's head as does the other cliff; and it is accordingly known in that region as the Beaverhead, although it is not the height thus named by Lewis and Clark. — O. D. WHEELER.

Courses and Distances of August 8th 1805.

South	2	Miles to the upper or principal entrance of Philanthrophy River on Lar^{d} being 5 Miles by water, passing seven bends on the Lar^{d} side, two islands and several bayous. this river is 30 y^{ds} wide is navigable and heads in the Rocky Mountains with Madison's River.
S. 20. W.	6.	to a few high trees on the Star^{d} side, the river bending to the East two miles from this course. and the distance by water 14 miles passing an island at 1 M. another at 7 M. several small bayous and 35 bends on Strd side the majority of the bends being short and circular.
Miles	8.	

[Clark:] *August 8th Thursday 1805*

We proceeded on early wind from the SW. The Thermomete[r] at 52.a.o. at Sun rise at 5 miles by water & 4½ on a derect line from the forks we passed a River on the Lar^{d} Side 30 yards wide and navagable for Some distance takeing its rise in the Mountains Easterly & with the waters of Madisons River, passes thro an extensive vallie open & furtill &c. this river we call *Philanthophy*. above this river (which has but little timber) Jeffersons R is crooked with Short bends a fiew Islands and maney gravelly Sholes, no large timber, Small Willow Birch & Srubs &c. Encamped on the Lar^{d} Side, R Fields joined us this even^{g} & informes that he could not find Shannon my foot yet verry Suore

[Lewis:] *Friday August 9th 1805.*

The morning was fair and fine; we set out at an early hour and proceeded on very well. some parts of the river more rapid than yesterday. I walked on shore across the land to a point which I presumed they would reach by 8. A. M. our usual time of halting. by this means I acquired leasure to accomplish some wrightings which I conceived from the nature of my instructions necessary lest any accedent should befall me on the long and reather hazardous rout I was now about to take. the party did not arrive and I returned about a mile and met them, here they halted and we breakfasted; I had killed two fine gees on my return. while we halted here Shannon arrived, and informed us that having missed the party the day on which he set out he had returned the next morning to the place from whence he had set out or furst left them and not finding [them] that he had supposed that they wer above him; that he then set out and marched one day up wisdom river, by which time he was convinced that they were not above him as the river could not be navigated; he then returned to the forks and had pursued us up this river. he brought the skins of three deer which he had killed which he said were in good order. he had lived very plentifully this trip but looked a good deel worried with his march. he informed us that Wisdom river still kept it's course obliquely down the Jefferson's river as far as he was up it.[1] immediately after breakfast I slung my pack and set out accompanyed by Drewyer Shields and M^c^Neal who had been previously directed to hold themselves in readiness for this service. I directed my course across the bottom to the Star^d^ plain left the beaver's head about 2 Miles to my left and interscepted the river about 8 miles from the point at which I had left it; I then waded it and continued my rout to the point where I could observe that it entered the mountain, but not being able to reach that place, changed my direction to the river which I struck some miles below the mountain and encamped for the evening having traveled 16.M. we passed a handsom little stream formed by some large spring[s] which rise in this wide bottom on the Lar^d^ side of the river. we killed two Antelopes on our way and brought with us as much meat as was necessary for our suppers and breakfast the next morning. we found this bottom fertile and covered with taller grass than usual. the river very crooked much divided by islands, shallow, rocky in many plases and very rapid; insomuch that I have my doubts whether the canoes could get on or not, or if they do it must be with great labour. Capt. Clark proceeded after I left him as usual, found the currant of the river increasing in rapidity towards evening. his hunters killed 2 antelopes only. in the evening it clouded up and we experienced a slight rain attended with some thunder and lightning. the musquetoes very troublesome this evening. there are some soft bogs in these vallies covered with turf. the earth of which this mud is composed is white or bluish white and appears to be argillacious.

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[1] According to Gass (p. 168) it was not until this day (Aug. 9) that the names conferred on these rivers were officially announced to the members of the expedition. — ED.

Courses and distances travelled by Capt. Clark and party on the 9th of August 1805.

S. 12° W. 4. to a Stard bend, passing two islands and 16 short circular bends on the Stard. side the distance by way of the river being 11 Miles.

S. 10° E. 1. to a high bottom on Lard. distance by water 3. M. passing
Miles 5 an island, a bayou and 4 short bends on Stard. side.

[Clark:] *August 9th Friday 1805—*

a fine morning wind from the N.E. we proceeded on verry well rapid places more noumerous than below, Shannon the man whome we lost on Wisdom River Joined us, haveing returned to the forks & prosued us up after prosueing Wisdom River one day.

Capt Lewis and 3 men Set out after brackft. to examine the river above, find a portage if possible, also the Snake Indians. I Should have taken this trip had I have been able to march, from the rageing fury of a tumer on my anckle musle, in the evening Clouded up and a fiew drops of rain Encamped on the Lard Side near a low bluff,[1] the river to day as yesterday, the three hunters Could kill only two antelopes to day, game of every kind scerce.

[Lewis:] *Saturday August 10th 1805.*

We set out very early this morning and continued our rout through the wide bottom on the Lard. side of the river. after passing a large creek at about 5 miles we fel in with a plain Indian road which led towards the point that the river entered the mountain we therefore pursued the road I sent Drewyer to the wright to kill a deer which we saw feeding and halted on the river under an immencely high perpendicular clift of rocks where it entered the mountain here we kindled a fire and waited for Drewyer. he arrived in about an hour and a half or at noon with three deer skins and the flesh of one of the best of them; we cooked and eat a haisty meal and departed, returning a sho[r]t distance to the Indian road which led us the best way over the mountains, which are not very high but ar[e] ruggid and approach the river closely on both sides just below these mountains I saw several bald Eagles and two large white headed fishinghawks boath these birds were the same common to our country. from the number of rattle snakes about the Clifts at which we halted we called them the rattle snake clifts. this serpent is the same before discribed with oval spots of yellowish brown. the river below the mountains is rapid rocky, very crooked, much divided by islands and withal shallow. after it enters the mountains it's bends are not so circuetous and it's general course more direct, but it is equally shallow les[s] divided more rocky and rapid. we continued our rout along the Indian road which led us sometimes over the hills and again in the narrow bottoms of the river till at the distance of fifteen M^{s} from the rattle snake Clifts we arrived in a ha[n]dsome open and leavel vally where the river divided itself nearly into two equal branches; here I halted and examined those streams and readily discovered from their size that it would be vain to attempt the navigation of either any further. here also the road forked one leading up the vally of each of these streams.[1] I therefore sent Drewer on one and Shields on the other to examine these roads for a short distance and to return and compare their information with respect to the size and apparent plainness of the roads as I was now determined to pursue that which appeared to have been the most traveled this spring. in the mean time I wrote a note to

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[1] Not far above a small stream known in our day as McHesser's Creek. — Ed.

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[1] The S.E. fork is the true Jefferson or Missouri River; the western branch is the present Prairie Creek. Their junction is very nearly on the parallel of 45° N. lat., and in the neighborhood of Grayling, Mont. — Ed.

Capt. Clark informing him of the occurrences which had taken place, recommending it to him to halt at this place untill my return and enforming him of the rout I had taken which from the information of the men on their return seemed to be in favour of the S W or Left hand fork which is reather the smallest. accordingly I put up my note on a dry willow pole at the forks, and set out up the S.E. fork, after proceeding about 1½ miles I discovered that the road became so blind that it could not be that which we had followed to the forks of Jefferson's river; neither could I find the tracks of the horses which had passed early in the spring along the other; I therefore determined to return and examine the other myself, which I did, and found that the same horses had passed up the West fork which was reather [the] largest, and more in the direction that I wished to pursue; I therefore did not hesitate about changing my rout but determined to take the western road. I now wrote a second note to Capt C. informing him of this change and sent Drewyer to put it with the other at the forks and waited untill he returned. there is scarcely any timber on the river above the Rt. Snake Clifts, nor is there anything larger than willow brush in sight of these forks. immediately in the level plain between the forks and about ½ a mile distance from them stands a high rocky mountain, the base of which is surrounded by the level plain; it has a singular appearance. the mountains do not appear very high in any direction tho' the tops of some of them are partially covered with snow. this convinces me that we have ascended to a great hight since we have entered the rocky Mountains, yet the ascent has been so gradual along the vallies that it was scarcely perceptable by land.[1] I do not beleive that the world can furnish an example of a river runing to the extent which the Missouri and Jefferson's rivers do through such a mountainous country and at the same time so navigable as they are. if the Columbia furnishes us such another example, a communication across the continent by water will be practicable and safe. but this I can scarcely hope from a knowledge of its having in it[s] comparitively short course to the ocean the same number of feet to decend which the Missouri and Mississippi have from this point to the Gulph of Mexico.

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[1] In their route from the Gate of the Mountains to Shoshone Cove Lewis and Clark passed through the very heart of the mineral belt of that region, its treasures all unknown to them. — O. D. Wheeler.

The valley of the west fork through which we passed for four miles boar a little to N of West and was about 1 mile wide hemned in on either side by rough mountain and steep Clifts of rock at 4½ miles this stream enters a beatifull and extensive plain about ten miles long and from 5 to six in width. this plain is surrounded on all sides by a country of roling or high wavy plains through which several little rivulets extend their wide vallies quite to the Mountains which surround the whole in an apparent Circular manner; forming one of the handsomest coves [*Shoshone*] I ever saw, of about 16 or 18 miles in diameter.[1] just after entering this cove the river bends to the N.W. and runs close under the Star^d hills. here we killed a deer and encamped on the Star^d side and made our fire of dry willow brush, the only fuel which the country produces. there are not more than three or four cottonwood trees in this extensive cove and they are but small. the uplands are covered with prickly pears and twisted or bearded grass and are but poor; some parts of the bottom lands are covered with grass and tolerably fertile; but much the greater proportion is covered with prickly pears, sedge, twisted grass, the pulpy leafed thorn southernwood wild sage &c and like the uplands is very inferior in point of soil. we traveled by estimate 30 M^s today, that is 10 to the Rattle Snake Clift, 15 to the forks of Jefferson's river and 5 to our camp in the cove. at the apparent extremity of the bottom above us two perpendicular clifts of considerable hight stand on either side of the river and uppers (*appears*) at this distance like a gate, it is about 10 M. due West.

Capt Clark set out at sun rise this morning and pursued his rout; found the river not rapid but shallow also very crooked. they were obliged to drag the canoes over many riffles in the course of the day. they passed the point which the natives call the beaver's head. it is a steep rocky clift of 150 feet high near the Star^d side of the river, opposite to it at the distance of 300 yards is a low clift of about 50 feet which is the extremity of a spur of the mountains about 4 miles distant on Lar^d at 4. P.M. they experienced a heavy shower of rain attended with hail thunder and Lightning which continued about an hour. the men defended themselves from the hail by means of the willow bushes but all the party got perfectly wet. after the shower was over they pursued their march and encamped on the Star^d side. only one deer killed by their hunters today. tho' they took up another by the way which had been killed three days before by Jo^s Fields and hung up near the river.

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[1] Now known as Horse Prairie, a name also given to Prairie Creek, and to a town on one of its branches. — ED.

Courses and distances traveled by Cap^t Clark August 10th 1805.

S. 30° W.	2.	to a Clift of rocks on Star^d 150 feet high called by the natives the beaver's head. distance by water 6½ miles, passing 8 bends on the Star^d side and 2 small bayous on Lar^d
S. 60° W.	2.	to a low bluff on the Lar^d side, distance by water 6½ miles, passing four islands and 18 bends on Star^d side and a low bluff and several bayous on the same side or Star^d
Miles	4	

[Clark:] *August 10th Saiturday 1805*

Some rain this morning at Sun rise and Cloudy we proceeded on passed a remarkable Clift point on the Star^d Side about 150 feet high, this Clift the Indians Call the *Beavers* head, opposit at 300 yards is a low clift of 50 feet which is a Spur from the Mountain on the Lar^d about 4 miles, the river verry Crooked, at 4 oClock a hard rain from the S W accompanied with hail Continued half an hour, all wet, the men Sheltered themselves from the hail with bushes. We Encamped on the Star^d Side near a Bluff, only one Deer killed to day, the one killed [by] Jo Fields 3 Days past & hung up we made use of river narrow, & Sholey but not rapid.

CHAPTER XIV

FROM BEAVER'S HEAD TO THE GREAT DIVIDE

Lewis's Journal, August 11–16, 1805
Clark's Journal, August 11–16

[Lewis:]

Sunday August 11th 1805. —

WE set out very early this morning; but the track which we had pursued last evening soon disappeared. I therefore resolved to proceed to the narrow pass on the creek about 10 miles West in hopes that I should again find the Indian road at the place, accordingly I passed the river which was about 12 yards wide and bar[r]ed in several places entirely across by beaver dams. and proceeded through the level plain directly to the pass. I now sent Drewyer to keep near the creek to my right and Shields to my left, with orders to surch for the road which if they found they were to notify me by placing a hat in the muzzle of their gun. I kept McNeal with me; after having marched in this order for about five miles I discovered an Indian on horse back about two miles distant coming down the plain towards us. with my glass I discovered from his dress that he was of a different nation from any that we had yet seen, and was satisfyed of his being a Sosone; his arms were a bow and quiver of arrows, and was mounted on an eligant horse without a saddle, and a small string which was attatched to the under jaw of the horse which answered as a bridle. I was overjoyed at the sight of this stranger and had no doubt of obtaining a friendly introduction to his nation provided I could get near enough to him to convince him of our being whitemen. I therefore proceeded towards him at my usual pace. when I had arrived within about a mile he mad[e] a halt which I did also and unloosing my blanket from my pack, I mad[e] him the signal of friendship known to the Indians of the Rocky mountains and those of the Missouri, which is by holding the mantle or robe in your hands at two corners and then th[r]owing [it] up in the air higher than the head bringing it to the earth as if in the act of spreading it, thus repeating three times. this signal of the robe has arrisen from a custom among all those nations of spreading a robe or skin for ther gests to set on when they are visited. this signal had not the desired effect, he still kept his position and seemed to view Drewyer an[d] Shields who were now comiming in sight on either hand with an air of suspicion, I wo[u]ld willingly have made them halt but they were too far distant to hear me and I feared to make any signal to them least it should increase the suspicion in the mind of the Indian of our having some unfriendly design upon him. I therefore haistened to take out of my sack some b[e]ads a looking glas and a few trinkets which I had brought with me for this purpose and leaving my gun and pouch with M^c^Neal advanced unarmed towards him. he remained in the same stedfast poisture untill I arrived in about 200 paces of him when he turn[ed] his ho[r]se about and began to move off slowly from me; I now called to him in as loud a voice as I could command repeating the word *tab-ba-bone*, which in their language signifyes *white-man*. but l[o]oking over his sholder he still kept his eye on Drewyer and Sheilds who wer still advancing neither of them haveing segacity enough to recollect the impropriety of advancing when they saw me thus in parley with the Indian. I now made a signal to these men to halt, Drewyer obeyed but Shields who afterwards told me that he did not obse[r]ve the signal still kept on the Indian halted again and turned his hor[s]e about as if to wait for me, and I beleive he would have remained untill I came up whith him had it not been for Shields who still pressed forward. whe[n] I arrived within about 150 paces I again repepeated the word tab-ba-bone and held up the trinkits in my hands and striped up my shirt sleve to give him an opportunity of seeing the colour of my skin and advanced leasure[ly] towards him but he did not remain untill I got nearer than about 100 paces when he suddonly turned his ho[r]se about, gave him the whip leaped the creek and disapeared in the willow brush in an instant and with him vanished all my hopes of obtaining horses for the preasent. I now felt quite as much mortification and disappointment as I had pleasure and expectation at the first sight of this indian. I fe[l]t soarly chargrined at the conduct of the men particularly Sheilds to whom I principally attributed this failure in obtaining an introduction to the natives. I now called the men to me and could not forbare abraiding them a little for their want of attention and imprudence on this occasion. they had neglected to bring my spye-glass which in haist I had droped in the plain with the blanket where I made the signal before mentioned. I sent Drewyer and Shields back to surche it, they soon found it and rejoined me. we now set out on the track of the horse hoping by that means to be lead to an indian camp, the trail of inhabitants of which should they abscond we should probably be enabled to pursue to the body of the nation to which they would most probably fly for safety. this rout led us across a large Island framed by nearly an equal division of the creek in this bottom; after passing to the open ground on the N. side of the creek we observed that the track made out toward the high hills about 3 M. distant in that direction. I thought it probable that their camp might probably be among those hills & that they would reconnoiter us from the tops of them, and that if we advanced haistily towards them that they would become allarmed and probably run off; I therefore halted in an elivated situation near the creek had a fire kindled of willow brush cooked and took breakfast. during this leasure I prepared a small assortment of trinkits consisting of some mockkerson awls a few strans of several kinds of b[e]ads some paint a looking glass &c which I attatched to the end of a pole and planted it near our fire in order that should the Indians return in surch of us the[y] might from this token discover that we were friendly and white persons. before we had finis[h]ed our meal a heavy shower of rain came on with some hail w[h]ich continued abo[u]t 20 minutes and wet us to the skin, after this shower we pursued the track of the horse but as the rain had raised the grass which he had trodden down it was with difficulty that we could follow it.

we pursued it however about 4 miles it turning up the valley to the left under the foot of the hills. we pas[sed] several places where the Indians appeared to have been diging roots today and saw the fresh tracks of 8 or ten horses but they had been wandering about in such a confused manner that we not only lost the track of the ho[r]se which we had been pursuing but could make nothing of them. in the head of this valley we passed a large bog covered with tall grass and moss in which were a great number of springs of cold pure water, we now turned a little to the left along the foot of the high hills and arrived at a small branch on which we encamped for the night, having traveled in different directions about 20 Miles and about 10 from the camp of last evening on a direct line. after meeting with the Indian today I fixed a small flag of the U'.S. to a pole which I made M^{c}Neal carry. and planted in the ground where we halted or encamped.

This morning Capt Clark dispatched several hunters a head; the morning being rainy and wet did not set out untill after an early breakfast. he passed a large Island which he called the 3000 mile Island from the circumstance of it's being that distance from the entrance of the Missouri by water.[1] a considerable proportion of the bottom on Lar^d side is a bog covered with tall grass and many parts would afford fine turf; the bottom is about 5 M^s wide and the plains which succeed it on either side extend about the same distance to the base of the mountains. they passed a number of small Islands and bayous on both sides which cut and intersect the bottoms in various directions. found the river shallow and rapid, insomuch that the men wer compelled to be in the water a considerable proportion of the day in drageing the canoes over the shoals and riffles. they saw a number of geese ducks beaver & otter, also some deer and antelopes. the men killed a beaver with a seting pole and tommahawked several Otter. the hunters killed 3 deer and an Antelope. Capt. C. observed some bunches of privy [privet] near the river. there are but few trees in this botom and those small narrow leafed Cottonwood. the principal growth is willow with the narrow leaf and Currant bushes. they encamped this evening on the upper point of a large Island near the Stard. shore.

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[1] The island is not in existence to-day. It was situated about half-way between the Beaver's Head and the present town of Dillon. — ED.

Courses and distances traveled by Capt. Clark August 11th 1805.

S. 20° W.	1.	to the lower point of 3000 M. Island. distance by water being 3. M. passing three small Islds. 6 bends on Stard. and 6 bayous on either side.
S. 25° W.	1 ½	to the head of the Island, distance by water 3½ M. passing 7 bends on Lard. opposite to the Island & two bayous on the same side. the Stard. Channel passes near the Stard. bluff
South	2 ½	to the upper point of a large Island, distance by water 7½. the main channel on the Lard. side passing 3 small Islands, and several small bayous and 15 bends on the Stard. side.
Miles	5	

[Clark:] *August 11th Sunday 1805.*

a Shower of rain this morning at Sun rise, Cloudy all the morning wind from the S.W. passed a large Island which I call the 3000 mile Island as it is Situated that distance from the mouth of the Missouri by water, a number of Small Bayoes running in different directions thro the Bottom, which is about 5 miles wide, then rises to an ellivated plain on each Side which extends as far. passed Several Small Islands and a number of Bayoes on each Side and Encamped on the upper point of a large Island, our hunters killed three Deer, one antilope, and Tomahawked Several *Orter* to day killed one *Beaver* with a Setting pole. I observed Some bunches of Privey on the banks

[Lewis:] *Monday August 12th 1805.*

This morning I sent Drewyer out as soon as it was light, to try and discover what rout the Indians had taken. he followed the track of the horse we had pursued yesterday to the mountain wher it had ascended, and returned to me in about an hour and a half. I now determined to pursue the base of the mountains which form this cove to the S.W. in the expectation of finding some Indian road which lead over the Mountains, accordingly I sent Drewyer to my right and Shields to my left with orders to look out for a road or the fresh tracks of horses either of which we should first meet with I had determined to pursue. at the distance of about 4 miles we passed 4 small rivulets near each other on which we saw som resent bowers or small conic lodges formed with willow brush. near them the indians had geathered a number of roots from the manner in which they had toarn up the ground; but I could not discover the root which they seemed to be in surch of. I [saw] several large hawks that were nearly black. near this place we fell in with a large and plain Indian road which came into the cove from the N.E. and led along the foot of the mountains to the S.W. o[b]liquely approaching the main stream which we had left yesterday. this road we now pursued to the S.W. at 5 miles it passed a stout stream which is a principal fork of the ma[i]n stream and falls into it just above the narrow pass between the two clifts before mentioned and which we now saw below us. here we halted and breakfasted on the last of our venison, having yet a small peice of pork in reserve. after eating we continued our rout through the low bottom of the main stream along the foot of the mountains on our right the valley for 5 M^{ls} further in a S.W. direction was from 2 to 3 miles wide the main stream now after discarding two stream[s] on the left in this valley turns abruptly to the West through a narrow bottom betwe[e]n the mountains. the road was still plain, I therefore did not dispair of shortly finding a passage over the mountains and of taisting the waters of the great Columbia this evening. we saw an animal which we took to be of the fox kind as large or reather larger than the small wolf of the plains. it's colours were a curious mixture of black, redis[h] brown and yellow. Drewyer shot at him about 130 yards and knocked him dow[n] bet [but] he recovered and got out of our reach. it is certainly a different animal from any that we have yet seen.[1] we also saw several of the heath cock with a long pointed tail and an uniform dark brown colour but could not kill one of them. they are much larger than the common dunghill fowls, and in their [h]abits and manner of flying resemble the growse or prarie hen. at the distance of 4 miles further the road took us to the most distant fountain of the waters of the Mighty Missouri in surch of which we have spent so many toilsome days and wristless nights. thus far I had accomplished one of those great objects on which my mind has been unalterably fixed for many years, judge then of the pleasure I felt in all[a]ying my thirst with this pure and ice-cold water which issues from the base of a low mountain or hill of a gentle ascent for ½ a mile. the mountains are high on either hand leave this gap at the head of this rivulet through which the road passes. here I halted a few minutes and rested myself. two miles below M^c^Neal had exultingly stood with a foot on each side of this little rivulet and thanked his god that he had lived to bestride the mighty & heretofore deemed endless Missouri. after refreshing ourselves we proceeded on to the top of the dividing ridge[1] from which I discovered immence ranges of high mountains still to the West of us with their tops partially covered with snow. I now decended the mountain[2] about ¾ of a mile which I found much steeper than on the opposite side, to a handsome bold runing Creek of cold Clear water. here I first tasted the water of the great Columbia river.[3] after a short halt of a few minutes we continued our march along the Indian road which lead us over steep hills and deep hollows to a spring on the side of a mountain where we found a sufficient quantity of dry willow brush for fuel, here we encamped for the night having traveled about 20 Miles. as we had killed nothing during the day we now boiled and eat the remainder of our pork, having yet a little flour and parched meal. at the creek on this side of the mountain I observed a species of deep perple currant lower in its growth, the stem more branched and leaf doubly as large as that of the Missouri. the leaf is covered on it's under disk with a hairy pubersence. the fruit is of the ordinary size and shape of the currant and is supported in the usual manner, but is ascid & very inferior in point of flavor.[1]

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[1] Probably the wolverene or carcajou (*Gulo luscus*). The "heath-cock" is *Centrocercus urophasianus*. — Ed.

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[1] The "divide" between the Atlantic and Pacific slopes, and the boundary line between Montana and Idaho. — ED.

[2] Lewis and Clark crossed the Rocky Mountain chain seven times, at six different places. Of these six passes, three were in the main range, the others in concomitant and more or less parallel ranges. They are: Lemhi Pass; an unnamed pass in the Bitter Root Range, where it joins the main range; Lolo Pass, in the same range; Gibbon's Pass; Lewis and Clark Pass; and Bozeman Pass. Of all these, only three were crossed by both Lewis and Clark; and Lemhi Pass is the only one in the main range that both of them saw and used. — O. D. WHEELER.

See both general and detailed maps, in our Atlas volume. — ED.

[3] This was the Lemhi River, whose waters at last find their way into the Columbia. — ED.

this morning Capt. Clark set out early. found the river shoally, rapid, shallow, and extreemly difficult. the men in the water almost all day. they are geting weak soar and much fortiegued; they complained of the fortiegue to which the navigation subjected them and wished to go by land Capt. C. engouraged them and passifyed them. one of the canoes was very near overseting in a rapid today. they proceeded but slowly. at noon they had a thunderstorm which continued about half an hour. their hunters killed 3 deer and a fawn. they encamped in a smooth plain near a few cottonwood trees on the Lard. side.

Courses and distances traveled by Capt. Clark. August 12th 1805.

S. 8° W.	2.	to the upper point of a large Island, distance by water 5½ M. passing many Bayous, 3 Islands and 9 bends on the Stard. side. the main channel on Stard. side.
S. 10° W.	2.	to a Stard. bend. distant by water 6½ passing 4 small and 2 large Islands, several bayous and a number of short bends. and a run of water on the Stard. side.
Miles	4.	

[Clark:] *August 12th Monday 1805*

We Set out early (Wind N.E.) proceeded on passed Several large Islands and three Small ones, the river much more Sholey than below which obliges us to haul the Canoes over those Sholes which Suckceed each other at Short intervales emencely laborious men much fatigued and weakened by being continualy in the water drawing the Canoes over the Sholes, encamped on the Lar^{d} Side men complain verry much of the emence labour they are obliged to undergo & wish much to leave the river. I passify them. the weather Cool, and nothing to eate but venison, the hunters killed three Deer to day.

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[1] This shrub is *Ribes viscosissimum*. — Ed.

[Lewis:] *Tuesday August* 13th. 1805.

We set out very early on the Indian road which still led us through an open broken country in a westerly direction. a deep valley appeared to our left at the base of a high range of mountains which extended from S.E. to N.W. having their sides better clad with pine timber than we had been accustomed to see the mountains and their tops were also partially covered with snow. at the distance of five miles the road after leading us down a long decending valley for 2 M^{s}. brought us to a large creek about 10 y^{ds}. wide; this we passed and on rising the hill beyond it had a view of a handsome little valley to our left of about a mile in width through which from the appearance of the timber I conjectured that a river passed. I saw near the creek some bushes of the white maple, the shumate [sumac] of the small species with the winged rib,[1] and a species of honeysuckle much in it's growth and leaf like the small honeysuckle of the Missouri only reather larger and bears a globular berry as large as a garden pea and as white as wax. this berry is formed of a thin smooth pellicle which envellopes a soft white musilagenous substance in which there are several small brown seed irregularly scattered or intermixed without any sell or perceptable membranous covering. we had proceeded about four miles through a wavy plain parallel to the valley or river bottom when at the distance of about a mile we saw two women, a man and some dogs on an eminence immediately before us. they appeared to v[i]ew us with attention and two of them after a few minutes set down as if to wait our arrival we continued our usual pace towards them. when we had arrived within half a mile of them I directed the party to halt and leaving my pack and rifle I took the flag which I unfurled and a[d]vanced singly towards them the women soon disappeared behind the hill, the man continued untill I arrived within a hundred yards of him and then likewise absconded. tho' I frequently repeated the word ***tab-ba-bone*** sufficiently loud for him to have heard it. I now haistened to the top of the hill where they had stood but could see nothing of them. the dogs were less shye than their masters they came about me pretty close I therefore thought of tying a handkerchief about one of their necks with some beads and other trinkets and then let them loose to surch their fugitive owners thinking by this means to convince them of our pacific disposition towards them but the dogs would not suffer me to take hold of them; they also soon disappeared. I now made a signal fror the men to come on, they joined me and we pursued the back track of these Indians which lead us along the same road which we had been traveling. the road was dusty and appeared to have been much traveled lately both by men and horses. these praries are very poor the soil is of a light yellow clay, intemixed with small smooth gravel, and produces little else but prickly pears, and bearded grass about 3 inches high. the prickley pear are of three species that with a broad leaf common to the missouri; that of a globular form also common to the upper pa[r]t of the Missouri and more especially after it enters the Rocky Mountains, also a 3rd peculiar to this country. it consists of small circular thick leaves with a much greater number of thorns. these thorns are stronger and appear to be barbed. the leaves grow from the margins of each other as in the broad leafed pear of the missouri, but are so slightly attatched that when the thorn touches your mockerson it adhears and brings with it the leaf covered in every direction with many others. this is much the most troublesome plant of the three. we had not continued our rout more than a mile when we were so fortunate as to meet with three female savages. the short and steep ravines which we passed concealed us from each other untill we arrived within 30 paces. a young woman immediately took to flight, an

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[1] Identified by Coues as *Rhus aromatica* var. *trilobata*; and the "honeysuckle" as *Actea spicata* var. *arguta* (?). — Ed.

Elderly woman and a girl of about 12 years old remained. I instantly laid by my gun and advanced towards them. they appeared much allarmed but saw that we were to near for them to escape by flight they therefore seated themselves on the ground, holding down their heads as if reconciled to die which the[y] expected no doubt would be their fate;[1] I took the elderly woman by the hand and raised her up repeated the word *tab-ba-bone* and strip[ped] up my shirt sleve to s[h]ew her my skin; to prove to her the truth of the ascertion that I was a white man for my face and ha[n]ds which have been constantly exposed to the sun were quite as dark as their own. they appeared instantly reconciled, and the men coming up I gave these women some beads a few mockerson awls some pewter looking-glasses and a little paint. I directed Drewyer to request the old woman to recall the young woman who had run off to some distance by this time fearing she might allarm the camp before we approached and might so exasperate the natives that they would perhaps attack us without enquiring who we were. the old woman did as she was requested and the fugitive soon returned almost out of breath. I bestoed an equ[i]volent portion of trinket on her with the others. I now painted their tawny cheeks with some vermillion which with this nation is emblematic of peace. after they had become composed I enformed them by signs that I wished them to conduct us to their camp that we wer anxious to become acquainted with the chiefs and warriors of their nation. they readily obeyed and we set out, still pursuing the road down the river. we had marched about 2 miles when we met a party of about 60 warriors mounted on excellent horses who came in nearly full speed, when they arrived I advanced towards them with the flag leaving my gun with the party about 50 paces behi[n]d me. the chief and two others who were a little in advance of the main body spoke to the women, and they informed them who we were and exultingly shewed the presents which had been given them these men then advanced and embraced me very affectionately in their way which is by puting their left arm over you[r] wright sholder clasping your back, while they apply their left cheek to yours and frequently vociforate the word *âh-hí-e*, *âh-hí-e* that is, I am much pleased, I am much rejoiced. bothe parties now advanced and we wer all carresed and besmeared with their grease and paint till I was heartily tired of the national hug. I now had the pipe lit and gave them smoke; they seated themselves in a circle around us and pulled of[f] their mockersons before they would receive or smoke the pipe. this is a custom among them as I afterwards learned indicative of a sacred obligation of sincerity in their profession of friendship given by the act of receiving and smoking the pipe of a stranger. or which is as much as to say that they wish they may always go bearfoot if they are not sincere; a pretty heavy penalty if they are to march through the plains of their country. after smoking a few pipes with them I distributed some trifles among them, with which they seemed much pleased particularly with the blue beads and vermillion. I now informed the chief that the object of our visit was a friendly one, that after we should reach his camp I would undertake to explain to him fully those objects, who we wer, from whence we had come and w[h]ither we were going; that in the mean time I did not care how soon we were in motion, as the sun was very warm and no water at hand. they now put on their mockersons, and the principal chief Ca-me-âh-wait made a short speach to the warriors. I gave him the flag which I informed him was an emblem of peace among whitemen and now that it had been received by him it was to be respected as the bond of union between us. I desired him to march on, which [he] did and we followed him; the dragoons moved on in squadron in our rear. after we had marched about a mile in this order he halted them and gave a second harang; after which six or eight of the young men road forward to their encampment and no further regularity was observed in the order of march. I afterwards understood that the Indians we had first seen this morning had returned and allarmed the camp; these men had come out armed cap a pe for action expecting to meet with their enimies the Minnetares of Fort de Prarie whome they Call Pâh'-kees. they were armed with b[o]ws arrow and Shields except three whom I observed with small pieces such as the N.W. Company furnish the natives with which they had obtained from the Rocky Mountain Indians on the Yellow stone river with whom they are at peace. on our arrival at their encampmen[t] on the river in a handsome level and fertile bottom at the distance of 4 M^{s}. from where we had first met them they introduced us to a londge made of willow brush and an old leather lodge which had been prepared for our reception by the young men which the chief had dispatched for that purpose. Here we were seated on green boughs and the skins of Antelopes. one of the warriors then pulled up the grass in the center of the lodge forming a smal[l] circle of about 2 feet in diameter the chief next produced his pipe and native tobacco and began a long cerimony of the pipe when we were requested to take of[f] our mockersons, the Chief having previously taken off his as well as all the warriors present. this we complyed with; the Chief then lit his pipe at the fire kindled in this little magic circle, and standing on the oposite side of the circle uttered a speach of several minutes in length at the conclusion of which he pointed the stem to the four cardinal points of the heavens first begining at the East and ending with the North. he now presented the pipe to me as if desirous that I should smoke, but when I reached my hand to receive it, he drew it back and repeated the same c[e]remony three times, after which he pointed the stem first to the heavens then to the center of the magic circle smoked himself with three whifs and held the pipe untill I took as many as I thought proper; he then held it to each of the white persons and then gave it to be consumed by his warriors.[1] this pipe was made of a dense simitransparent green stone very highly polished about 2½ inches long and of an oval figure, the bowl being in the same direction with the stem. a small piece of birned clay is placed in the bottom of the bowl to seperate the tobacco from the end of the stem and is of an irregularly rounded figure not fitting the tube purfectly close in order that the smoke may pass. this is the form of the pipe. their tobacco is of the same kind of that used by the Minnetares Mandans and Ricares of the Missouri. the Shoshonees do not cultivate this plant, but obtain it from the Rocky mountain Indians and some of the bands of their own nation who live further south. I now explained to them the objects of our journey &c. all the women and children of the camp were shortly collected about the lodge to indulge themselves with looking at us, we being the first white persons they had ever seen. after the cerimony of the pipe was over I distributed the remainder of the small articles I had brought with me among the women and children. by this time it was late in the evening and we had not taisted any food since the evening before. the Chief informed us that they had nothing but berries to eat and gave us some cakes of serviceberries and Choke cherries which had been dryed in the sun; of these I made a hearty meal, and then walked to the river, which I found about 40 yards wide very rapid clear and about 3 feet deep. the banks low and abrupt as those of the upper part of the Missouri, and the bed formed of loose stones and gravel. Cameahwait informed me that this stream discharged itself into another doubly as large at the distance of half a days march which came from the S.W. but he added on further enquiry that there was but little more timber below the junction of those rivers than I saw here, and that the river was confined between inacessable mountains, was very rapid and rocky insomuch that it was impossible for us to pass either by land or water down this river to the great lake where the white men lived as he had been informed. this was unwelcome

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[1] The same habit of holding down the head and inviting the enemy to strike, when all chance of escape is gone, is preserved in Egypt to this day. — BIDDLE (i, p. 363).

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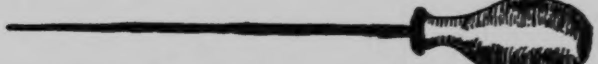
[1] For description of a similar ceremony among Wisconsin Indians, see *Wis. Hist. Colls.* xvi, 43, 44. Full accounts of the calumet or tobacco-pipe, its ceremonial and official use, and the dance connected with it, are given in *Jesuit Relations*, especially the following citations: vi, pp. 329, 330; lviii, 97; lix, 119, 131–137, 310, 311; lxv, 123; see also Index, art. Calumet and Tobacco. — ED.



information but I still hoped that this account had been exagerated with a view to detain us among them. as to timber I could discover not any that would answer the purpose of constructing canoes or in short more than was bearly necessary for fuel consisting of the narrow leafed Cottonwood and willow, also the red willow Choke Cherry service berry and a few currant bushes such as were common on the Missouri. these people had been attacked by the Minetares of Fort de prarie this spring and about 20 of them killed and taken prisoners. on this occasion they lost a great part of their horses and all their lodges except that which they had erected for our accomodation; they were now living in lodges of a conic figure made of willow brush. I still observe a great number of horses feeding in every direction around their camp and therefore entertain but little doubt but we shall be enable[d] to furnish ourselves with an adiquate number to transport our stores even if we are compelled to travel by land over these mountains. on my return to my lodge an indian called me in to his bower and gave me a small morsel of the flesh of an antelope boiled, and a peice of a fresh salmon roasted; both which I eat with a very good relish. this was the first salmon I had seen and perfectly convinced me that we were on the waters of the Pacific Ocean. the course of this river is a little to the North of west as far as I can discover it; and is bounded on each side by a range of high Mountains. tho' those on the E. side are lowest and more distant from the river.

This evening the Indians entertained us with their dancing nearly all night. at 12 O'C.k I grew sleepy and retired to rest leaving the men to amuse themselves with the Indians. I observe no essential difference between the music and manner of dancing among this nation and those of the Missouri. I was several times awoke in the course of the night by their yells but was too much fortiegued to be deprived of a tolerable sound night's repose.

This morning Capt Clark set out early having previously dispatched some hunters ahead. it was cool and cloudy all the forepart of the day, at 8 A.M. they had a slight rain. they passed a number of shoals over which they were obliged to drag the canoes; the men in the water ¾^{ths} of the day, the[y] passed a bold runing stream 7 y^{ds} wide on the Lar^d side just below a high point of Limestone rocks. this stream we call M^{c}Neal's Creek after Hugh M^{c}Neal one of our party. this creek heads in the Mountains to the East and forms a handsome valley for some miles between the mountains.[1] from the top of this limestone Clift above the creek The beaver's head boar N 24°E.12.M^s the course of Wisdom river or that which the opening of it's valley makes through the mountains is N.25.W. to the gap through which Jefferson's river enters the mountains above is S 18° W 10.M. they killed one deer only today. saw a number of Otter some beaver Antelopes ducks gees and Crains. they caught a number of fine trout as they have every day since I left them. they encamped on Lr^d in a smooth level prarie near a few cottonwood trees, but were obliged to make use of the dry willow brush for fuel.

Courses and distances travelled by Cap^t Clark. August 13th 1805.

South	1.	to a point of rocks about 70 feet high on Star^d distance by water 4 M^s passing the head of the Island. at 2½ M^s opposite to which we encamped last evening. also the entrance of a bold Creek 7 Y^{ds} wide on Lar^d behind an Isld. this we called M^{c}Neal's Creek, after Hugh M^{c}Neal of our party.
S. 30. W.	4.	to a Clift of high rocks on the Star^d side * distance by water 12 M. passing several isl^{ds} and bayous on either side the river very crooked and bends short.
Miles.	5	

[Clark:] *August 13th Tuesday 1805 —*

a verry Cool morning the Thermometer Stood at 52, a, o' all the fore part of the day. Cloudy at 8 oClock a mist of rain we proceeded on passed enumerable Sholes obliged to haul the boat ¾ of the Day over the Shole water. passed the mouth of a bold running Stream 7 yards wide on the Lar^d Side below a high Point of Limestone rocks on the Star^d

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[1] Now known as Black-tailed Deer Creek; at its mouth is located the town of Dillon. — Ed.

Side. this Creek heads in the mountains to the easte and forms a Vallie between two mounatins. I call this stream McNeal Creek From the top of this rock the

Point of the Beaver head hill bears N. 24° E 12 Ms

The Course of the Wisdom river is N. 25° W.

The gap at the place the river passes thro' a mountain in advance is S 18° W. 10 Ms

proceeded on and Encamped on the Lard side no wood except dry willows and them Small, one Deer killed to day. The river obliges the men to undergo great fatigue and labour in hauling the Canoes over the Sholes in the Cold water naked.

[Lewis:] *Wednesday August 14th*

In order to give Capt Clark time to reach the forks of Jefferson's river I concluded to spend this day at the Shoshone[1] Camp and obtain what information I could with rispect to the country. as we had nothing but a little flour and parched meal to eat except the berries with which the Indians furnished us I directed Drewyer and Shields to hunt a few hours and try to kill something, the Indians furnished them with horses and most of their young men also turned out to hunt. the game which they principally hunt is the Antelope which they pursue on horseback and shoot with their arrows. this animal is so extreemly fleet and dureable that a single horse has no possible chance to overtake them or run them down. the Indians are therefore obliged to have recorce to strategem when they discover a herd of the Antelope they seperate and scatter themselves to the distance of five or six miles in different directions arround them generally scelecting some commanding eminence for a stand; some one or two now pursue the herd at full speed over the hills vallies gullies and the sides of precipices that are tremendious to view. thus after runing them from five to six or seven miles the fresh horses that were in waiting head them and drive them back persuing them as far or perhaps further quite to the other extreem of the hunters who now in turn pursue on their fresh horses thus worrying the poor animal down and finally killing them with their arrows. forty or fifty hunters will be engaged for half a day in this manner and perhaps not kill more than two or three Antelopes. they have but few Elk or black tailed deer, and the common red deer they cannot take as they secrete themselves in the brush when pursued, and they have only the bow and arrow w[h]ich is a very slender dependence for killing any game except such as they can run down with their horses. I was very much entertained with a view of this indian chase; it was after a herd of about 10 Antelope and about 20 hunters. it lasted about 2 hours and considerable part of the chase in view from my tent. about 1.A.M. the hunters returned had not killed a single Antelope, and their horses foaming with sweat. my hunters returned soon after and had been equally unsuccessfull. I now directed M^cNeal to make me a little paist with the flour and added some berries to it which I found very pallatable.

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[1] The Shoshoni (more often called Snake) Indians are one of the tribes of a linguistic stock known as Shoshonean, which formerly occupied a large part of the great interior basin of the United States — from western Montana to western Texas, and from eastern Oregon to southeastern California. Of this stock the principal tribes are the Comanche, Paiute, Paviotso, Tobikhar, Tusayans, and Uta (or Ute). The Shoshoni wandered through southern Idaho and western Wyoming. See Powell's "Indian Linguistic Families," in *U. S. Bur. Ethnol. Rep.*, 1885–86, pp. 108-110; Chittenden's *Amer. Fur Trade*, pp. 884–886; Clark's *Indian Sign Language* (Phila., 1885), pp. 337, 338; and Marryatt's *Travels of Monsieur Violet* (London, 1843). — Ed.

The means I had of communicating with these people was by way of Drewyer who understood perfectly the common language of jesticulation or signs which seems to be universally understood by all the Nations we have yet seen.[1] it is true that this language is imperfect and liable to error but is much less so than would be expected. the strong parts of the ideas are seldom mistaken.[1]

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[1] Communication by signs and gestures is doubtless the most primitive form of human language; but it has also largely taken the place of vocal utterance among persons or peoples of differing tongues. Certain signs and gestures are at once so universal and obvious that they can be understood by all; accordingly, our North American aborigines have therein a limited means of communication between all their polyglot races and tribes. A regular code of signs has arisen, however, among the Plains tribes of Indians, among whom so many varying languages exist, while their mutual need of intercourse has been much greater than among the mountain tribes. The most elaborate treatise on the subject is Mallery's "Sign Language among North American Indians, compared with that among other Peoples and Deaf-Mutes," in *U. S. Bur. Ethnol. Rep.*, 1879–80, pp. 263–552; it is elucidated by numerous illustrations. (Cf.

I now told Cameahwait that I wished him to speak to his people and engage them to go with me tomorrow to the forks of Jeffersons river where our baggage was by this time arrived with another Chief and a large party of whitemen who would wait my return at that place. that I wish them to take with them about 30 spare horses to transport our baggage to this place where we would then remain sometime among them and trade with them for horses, and finally concert our future plans for geting on to the ocean and of the traid which would be extended to them after our return to our homes. he complyed with my request and made a lengthey harrangue to his village. he returned in about an hour and a half and informed me that they would be ready to accompany me in the morning. I promised to reward them for their trouble. Drewyer who had had a good view of their horses estimated them at 400. most of them are fine horses. indeed many of them would make a figure on the South side of James River or the land of fine horses. I saw several with spanish brands on them, and some mules which they informed me that they had also obtained from the Spaniards. I also saw a bridle bit of spanish manufactary, and sundry other articles which I have no doubt were obtained from the same source.[2] notwithstanding the extreem poverty of those poor people they are very merry they danced again this evening untill midnight. each warrior keep[s] one or more horses tyed by a cord to a stake near his

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his "Introduction to the Study of Sign Language," and "Collection of Gesture-signs and Signals" — both published in 1880 by the Bureau of Ethnology.) Another admirable work is W. P. Clark's *Indian Sign Language* (Phila., 1885); it contains, besides a full and carefully explained vocabulary, many valuable notes on the history, mythology, and customs of the tribes west of the Mississippi. — Ed.

[1] At this point in the MS. is an interlined memorandum, apparently written by Clark: "This part to come in the 20th, related to Capt. C. thro' the interpreter." The matter thus indicated (written on pp. 104–109 of Codex F), which comprises the information about routes to the Columbia, given to the explorers by Cameahwait, is accordingly transferred to the entry for Aug. 20. — Ed.

[2] An interesting account of the trade between the Spaniards and the Indians is given by Stoddard in his *Louisiana*, pp. 453-455. — Ed.

lodge both day and night and are always prepared for action at a moments warning. they fight on horseback altogether. I observe that the large flies are extreemly troublesome to the horses as well as ourselves.

The morning being cold and the men stif and soar from the exertions of yesterday Cap^{t} Clark did not set out this morning untill 7. A.M. the river was so crooked and rapid that they made but little way. at one mile he passed a bold runing stream on Star^{d} which heads in a mountain to the North, on which there is snow. this we called track Creek. it is 4 yards wide and 3 feet deep at 7 M^{s} passed a stout stream which heads in some springs under the foot of the mountains on Lar^{d} the river near the mountain they found one continued rapid, w[h]ich was extreemly laborious and difficult to ascend. this evening Charbono struck his indian Woman for which Cap^{t} C. gave him a severe repremand. Joseph and Reubin Fields killed 4 deer and an Antelope, Cap^{t} C. killed a buck. several of the men have lamed themselves by various accedents in working the canoes through this difficult part of the river, and Cap^{t} C. was obliged personally to assist them in this labour. they encamped this evening on Lar^{d} side near the rattlesnake Clift.

Courses and distances traveled by Cap^{t} Clark. August 14th 1805.

S. 14° W.	7.	to the gap of the mountain at the rattlesnake Clifts where the river enters the mountains. the same being 16 miles by the meanders of the river. the river cold shoally and one continued rapid throughout. passed a number of small Islands and bayous on either side. passed a bold running stream on Star^{d} at 1 M. called *track Creek.* also another at 6 M. higher up, on Lar^{d} side. and encamped on Lar^{d} 2 Miles by water short of the extremity of this course distance by land scarcely ½ a Mile.
Miles	7.	

[Clark:] *August* 14th *Wednesday* 1805

a Cold morning wind from the S.W. The Thermometer Stood at 51° a o, at Sunrise the morning being cold and men Stiff. I deturmind to delay & take brackfast at the place we Encamped. we Set out at 7 oClock and proceeded on river verry Crooked and rapid as below Some fiew trees on the borders near the mountain, passed a bold running Stream at 1 mile on the Stard Side which heads in a mountain to the North on which there is Snow passed a bold running Stream on the Lard Side which heads in a Spring undr a mountain, the river near the mountain is one continued rapid, which requres great labour to push & haul the Canoes up. We Encamped on the Lard Side near the place the river passes thro' the mountain. I checked our interpreter for Striking his woman at their Dinner.

The hunters Jo. & R. Fields killed 4 Deer & a antilope, I killed a fat Buck in the evening, Several men have hurt themselves pushing up the Canoes. I am oblige to [use] a pole occasionally.

[Lewis:] *Thursday August 15th 1805.*

This morning I arrose very early and as hungary as a wolf. I had eat nothing yesterday except one scant meal of the flour and berries except the dryed cakes of berries which did not appear to satisfy my appetite as they appeared to do those of my Indian friends. I found on enquiry of McNeal that we had only about two pounds of flour remaining. this I directed him to divide into two equal parts and to cook the one half this morning in a kind of pudding with the burries as he had done yesterday and reserve the ballance for the evening. on this new fashoned pudding four of us breakfasted, giving a pretty good allowance also to the Chief who declared it the best thing he had taisted for a long time. he took a little of the flour in his hand, taisted and examined [it] very scrutinously and asked me if we made it of roots. I explained to him the manner in which it grew. I hurried the departure of the Indians. the Chief addressed them several times before they would move they seemed very reluctant to accompany me. I at length asked the reason and he told me that some foolish persons among them had suggested the idea that we were in league with the Pahkees and had come on in order to decoy them into an ambuscade where their enimies were waiting to receive them. but that for his part he did not believe it. I readily perceived that our situation was not enterely free from danger as the transicion from suspicion to the confermation of the fact would not be very difficult in the minds of these ignorant people who have been accustomed from their infancy to view every stranger as an enimy. I told Cameahwait that I was sorry to find that they had put so little confidence in us, that I knew they were not acquainted with whitemen and therefore could forgive them. that among whitemen it was considered disgracefull to lye or entrap an enimy by falsehood. I told him if they continued to think thus meanly of us that they might rely on it that no whitemen would ever come to trade with them or bring them arms and amunition and that if the bulk of his nation still entertained this opinion I still hoped that there were some among them that were not affraid to die, that were men and would go with me and convince themselves of the truth of what I had asscerted. that there was a party of whitemen waiting my return either at the forks of Jefferson's river or a little below coming on to that place in canoes loaded with provisions and merchandize. he told me for his own part he was determined to go, that he was not affraid to die. I soon found that I had touched him on the right string; to doubt the bravery of a savage is at once to put him on his metal. he now mounted his horse and haranged his village a third time; the perport of which as he afterwards told me was to inform them that he would go with us and convince himself of the truth or falsity of what we had told him if he was sertain he should be killed, that he hoped there were some of them who heard him were not affraid to die with him and if there was to let him see them mount their horses and prepare to set out. shortly after this harange he was joined by six or eight only and with these I smoked a pipe and directed the men to put on their packs being determined to set out with them while I had them in the humour at half after 12 we set out, several of the old women were crying and imploring the great sperit to protect their warriors as if they were going to inevitable distruction. we had not proceeded far before our party was augmented by ten or twelve more, and before we reached the Creek which we had passed in the morning of the 13th it appeared to me that we had all the men of the village and a number of women with us. this may serve in some measure to ilustrate the capricious disposition of those people, who never act but from the impulse of the moment. they were now very cheerfull and gay, and two hours ago they looked as sirly as so many imps of satturn. when we arrived at the spring on the side of the mountain where we had encamped on the 12th the Chief insi[s]ted on halting to let the horses graize with which I complyed and gave the Indians smoke. they are excessively fond of the pipe; but have it not much in their power to indulge themselves with even their native tobacco as they do not cultivate it themselves. after remaining about an hour we again set out, and by engaging to make compensation to four of them for their trouble obtained the previlege of riding with an indian myself and a similar situation for each of my party. I soon found it more tiresome riding without [s]tirrups than walking and of course chose the latter making the Indian carry my pack. about sunset we reached the upper part of the level valley of the Cove which [we] now called Shoshone Cove. the grass being birned on the North side of the river we passed over to the south and encamped near some willow brush about 4 miles above the narrow pass between the hills noticed as I came up this cove. the river was here about six yards wide, and frequently damed up by the beaver. I had sent Drewyer forward this evening before we halted to kill some meat but he was unsuccessfull and did not rejoin us untill after dark I now cooked and [divided] among six of us [to] eat the remaining pound of flour stired in a little boiling water. Capt. Clark delayed again this morning untill after breakfast, when he set out and passed between low and rugged mountains which had a few pine trees distributed over them. the clifts are formed of limestone and a hard black rock intermixed. no trees on the river, the bottoms narrow river crooked shallow shoally and rapid. the water is as coald as that of the best springs in our country. the men as usual suffered excessively with fatiegue and the coldness of the water to which they were exposed for hours together. at the distance of 6 miles by water they passed the entrance of a bold creek on Stard. side 10 yds. wide and 3 f. 3 I. deep which we called Willard's Creek[1] after Alexander Willard one of our party. at 4 miles by water from their encampment of las[t] evening passed a bold branch which tumbled down a steep precipice of rocks from the mountains on the Lard. Capt. Clark was very near being bitten twice today by rattlesnakes, the Indian woman also narrowly escaped. they caught a number of fine trout. Capt. Clark killed a buck which was the only game killed today. the venison has an uncommon bitter taist which is unpleasant I presume it proceeds from some article of their food, perhaps the willow, on the leaves of which they feed very much. they encamped this evening on the Lard. side[2] near a few cottonwood trees, about which there were the remains of several old Indian brush lodges.

Courses and distances traveled by Capt. Clark August 15th. 1805.

S. 25° W.	4.	to the entrance of Willard's Creek on Stard. 10 Yds. wide bold current. so called from Alexander Willard one of our party. the distance by water 6 Miles. passed a point of rocks at 2 M. on Stard. a bold run on Lard. at 4. Miles; a second point of rocks on Lard. at 5 and an Island.
S. 22° E.	1.	to a small bottom on the Lard. side, passing a high clift on Stard. opposite to a steep sloping hill. the same being 3.M. by water
S. 20° W.	2 M.	to a small branch on Lard. side near which is a small bottom covered with clover and a few cottonwood trees where they encamped on Lard. side for the evening.
Miles	7	

During my absence Capt. Clark had made the following observations.

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[1] On later maps named Grasshopper Creek; on it is the town of Bannock, Idaho. — Ed.

[2] At Gallagher's Creek. — Ed.

Point of Observation N°. 41.

August 11th 1805. on the upper point of an island at the encampment of this evening, observed time and distance of ☽'s Western limb from Antares. ✱ West. with Sextant.

	Time			Distance				Time			Distance		
	h	m	s	°	′	″		h	m	s	°	′	″
P. M.	9.	38.	1.	91.	57.	–.	P. M.	9.	54.	31.	91.	49.	45.
	"	41.	20.	"	56.	45.		"	56.	11.	"	48.	30.
	"	44.	39.	"	55.	15.		"	58.	14.	"	48.	–.
	"	47.	8.	"	54.	30.		10.	–.	23.	"	47.	45.
	"	50.	38.	"	54.	15.		"	1.	39.	"	47.	45.
	"	51.	52.	"	53.	45.		"	2.	32.	"	47.	–.

Longitude deduced from this observation West from Greenwich } [blank space in MS.]

Point of Observation N°. 42.

August 15th 1805. On the Lar^{d} side of the Missouri at the rattlesnake Clifts. Observed

Meridian Altitude of ⊙'s L. L. with Octant by the back observation } 65° 47′ –″

Latitude deduced from this observation 44° –′ 48″.1.
this place ought to stand at about 44° 50′ or thereabouts.

[Clark:] *August 15th Thursday* 1805

a Cool windey morning wind from the SW we proceeded on thro' a ruged low mountain Water rapid as usial passed a bold running Stream which falls from the mountain on the Lar^{d} Side at 4 miles also a bold running Stream 10 yards wide on the Star^{d} Side 9 feet 3 In. Deep at 6 miles, willards Creek the bottoms narrow, the Clifs of a Dark brown Stone Some limestone intermixed. an Indian road passes on the Lar^{d} Side latterly used. Took a Meridian altitude at the Com^{mt} of the Mountain with Octant 65° 47′ . 0″. The Lat^{d} *44°–0′–48″* 1/10 proceeded on with great labour & fatigue to the Mouth of a Small run on the Lar^{d} Side passed Several Spring runs, the men Complain much of their fatigue and being repetiedly in the water which weakens them much perticularly as they are obliged to live on pore Deer meet which has a Singular bitter taste. I have no accounts of Capt Lewis Sence he Set out

In walking on Shore I Saw Several rattle Snakes and narrowly escaped at two different times, as also the Squar when walking with her husband on Shore. I killed a Buck nothing else killed to day. This mountn. I call rattle Snake mountain. not one tree on either Side to day[1]

[Lewis:] *Friday August 16th 1805.*

I sent Drewyer and Shields before this morning in order to kill some meat as neither the Indians nor ourselves had any thing to eat. I informed the C[h]eif of my view in this measure, and requested that he would keep his young men with us lest by their hooping and noise they should allarm the game and we should get nothing to eat, but so strongly were there suspicions exited by this measure that two parties of discovery immediately set out one on e[a]ch side of the valley to watch the hunters as I beleive to see whether they had not been sent to give information of their approach to an enemy that they still preswaided themselves were lying in wait for them. I saw that any further effort to prevent their going would only add strength to their suspicions and therefore said no more. after the hunters had been gone about an hour we set out. we had just passed through the narrows when we saw one of the spies comeing up the level plain under whip, the chief pawsed a little and seemed somewhat concerned, I felt a good deel so myself and began to suspect that by some unfortunate accedent that perhaps some of there enimies had straggled hither at this unlucky moment; but we were all agreeably disappointed on the arrival of the young man to learn that he had come to inform us that one of the whitemen had killed a deer. in an instant they all gave their horses the whip and I was taken nearly a mile before I could learn what were the tidings; as I was without [s]tirrups and an Indian behind me the jostling was disagreeable I therefore reigned up my horse and forbid the indian to whip him who had given him the lash at every jum[p] for a mile fearing he should loose a part of the feast. the fellow was so uneasy that he left me the horse dismounted and ran on foot at full speed I am confident a mile. when they arrived where the deer was which was in view of me they dismounted and ran in tumbling over each other like a parcel of famished dogs each seizing and tearing away a part of the intestens which had been previously thrown out by Drewyer who killed it; the seen was such when I arrived that had I not have had a pretty keen appetite myself I am confident I should not have taisted any part of the venison shortly. each one had a peice of some discription and all eating most ravenously. some were eating the kidnies the melt and liver and the blood runing from the corners of their mouths, others were in a similar situation with the paunch and guts but the exuding substance in this case from their lips was of a different discription. one of the last who att[r]acted my attention particularly had been fortunate in his allotment or reather active in the division, he had provided himself with about nine feet of the small guts one end of which he was chewing on while with his hands he was squezzing the contents out at the other. I really did not untill now think that human nature ever presented itself in a shape so nearly allyed to the brute creation. I viewed these poor starved divils with pity and compassion I directed M^{c}Neal to skin the deer and reserved a quarter, the ballance I gave the Chief to be divided among his people; they devoured the whole of it nearly without cooking. I now boar obliquely to the left in order to interscept the creek where there was some brush to make a fire, and arrived at this stream where Drewyer had killed a second deer; here nearly the same seene was encared [*sc.* enacted]. a fire being kindled we cooked and eat and gave the ballance of the two deer to the Indians who eat the whole of them even to the soft parts of the hoofs. Drewyer joined us at breakfast with a third deer. of this I reserved a quarter and gave the ballance to the Indians. they all appeared now to have filled themselves and were in a good humour. this morning early soon after the hunters set out a considerable part of our escort became allarmed and returned 28 men and three women only continued with us. after eating and suffering the horses to graize about 2 hours we renued our march and towa[r]ds evening arrived at the lower part of the cove Shields killed an Antelope on the way a part of which we took and gave the remainder to the Indians. being now informed of the place at which I expected to meat Capt C. and the party they insisted on making a halt, which was complyed with. we now dismounted and the Chief with much cerimony put tippets about our necks such as they t[h]emselves woar I redily perceived that this was to disguise us and owed it's origine to the same cause already mentioned. to give them further confidence I put my cocked hat with feather on the chief and my over shirt being of the Indian form my hair deshivled and skin well browned with the sun I wanted no further addition to make me a complete Indian in appearance the men followed my example and we were so[o]n completely metamorphosed. I again repeated to them the possibility of the party not having arrived at the place which I expected they were, but assured them they could not be far below, lest by not finding them at the forks their suspicions might arrise to such hight as to induce them to return precipitately. we now set out and rode briskly within sight of the forks making one of the Indians carry the flag that our own party should know who we were. when we arrived in sight at the distance of about 2 miles I discovered to my mortification that the party had not arrived, and the Indians slackened their pace. I now scarcely new what to do and feared every moment when they would halt altogether, I now determined to restore their confidence cost what it might and therefore gave the Chief my gun and told him that if his enimies were in those bushes before him that he could defend himself with that gun, that for my own part I was not affraid to die and if I deceived him he might make what uce of the gun he thought proper or in other words that he might shoot me. the men also gave their guns to other indians which seemed to inspire them with more confidence; they sent their spies before them at some distance and when I drew near the place I thought of the notes which I had left and directed Drewyer to go with an Indian man and bring them to me which he did. the indian seeing him take the notes from the stake on which they had been placed. I now had recource to a stratagem in which I thought myself justifyed by the occasion, but which I must confess set a little awkward. it had it's desired effect. after reading the notes which were the same I had left I told the Chief that when I had left my brother Chief with the party below where the river entered the mountain that we both agreed not to bring the canoes higher up than the next forks of the river above us wherever this might happen, that there he was to wait my return, should he arrive first, and that in the event of his not being able to travel as fast as usual from the difficulty of the water, that he was to send up to the first forks above him and leave a note informing me where he was, that this note was left here today and that he informed me that he was just below the mountains and was coming on slowly up, and added that I should wait here for him, but if they did not beleive me that I should send a man at any rate to the Chief and they might also send one of their young men with him, that myself and two others would remain with them at this place. this plan was readily adopted and one of the young men offered his services; I promised him a knife and some beads as a reward for his confidence in us. most of them seemed satisfyed but there were several that complained of the Chief's exposing them to danger unnecessarily and said that we told different stories, in short a few were much dissatisfyed. I wrote a note to Capt. Clark by the light of some willow brush and directed Drewyer to set out early being confident that there was not a moment to spare. the chief and five or six others slept about my fire and the others hid themselves in various parts of the willow brush to avoid the enimy whom they were fearfull would attack tham in the course of the night. I now entertained various conjectures myself with rispect to the cause of Capt. Clarks detention and was even fearfull that he had found the river so difficult that he had halted below the Rattlesnake bluffs. I knew that if these people left me that they would immediately disperse and secrete themselves in the mountains where it would be impossible to find them or at least in vain to pursue them and that they would spread the allarm to all other bands within our reach & of course we should be disappointed in obtaining horses, which would vastly retard and increase the labour of our voyage and I feared might so discourage the men as to defeat the expedition altogether. my mind was in reallity quite as gloomy all this evening as the most affrighted indian but I affected cheerfullness to keep the Indians so who were about me. we finally laid down and the Chief placed himself by the side of my musquetoe bier. I slept but little as might be well expected, my mind dwelling on the state of the expedition which I have ever held in equal estimation with my own existence, and the fait of which appeared at this moment to depend in a great measure upon the caprice of a few savages who are ever as fickle as the wind. I had mentioned to the chief several times that we had with us a woman of his nation who had been taken prisoner by the Minnetares, and that by means of her I hoped to explain myself more fully than I could do signs. some of the party had also told the Indians that we had a man with us who was black and had short curling hair, this had excited their curiossity very much. and they seemed quite as anxious to see this monster as they wer[e] the merchandize which we had to barter for their horses.

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[1] Here Clark interpolates (Codex G, pp. 60–62) his "Courses and Distances above Wisdom River," covering their progress during August 7–16. This matter will be found in "Scientific Data," vol. v. — Ed.

At 7. AM. Capt. C. set out after breakfast. he changed the hands in some of the canoes; they proceeded with more ease than yesterday, yet they found the river still rapid and shallow insomuch that they were obliged to drag the large canoes the greater part of the day. the water excessively cold. in the evening they passed several bad rapids. considerable quantities of the buffaloe clover grows along the narrow bottoms through which they passed. there was no timber except a few scatiring small pine on the hills. willow service berry and currant bushes were the growth of the river bottoms. they geatherd considerable quantities of service berries, and caught some trout. one deer was killed by the hunters who slept out last night. and did not join the party untill 10.A.M. Capt. Clark sent the hunters this evening up to the forks of the river which he discovered from an eminence; they mus[t] have left this place but a little time before we arrived. this evening they encamped on the Lard. side only a few miles below us. and were obliged like ourselves to make use of small willow brush for fuel. the men were much fatigued and exhausted this evening.

Courses and distances traveled by Capt. Clark August 16th 1805.

S. 18°. W.	3.	to a Lard. bend under a low bluff, distance by water 7. M. the river bending to the Stard. under some high land, very crooked narrow shallow and small. passed several Islands 4 of which were opposite to each other. called this service berry Valley, from the great abundance of that fruit found here.
S. 12°. W.	2.	to a high Clift on the Stard. side, distance by water 4. M. passed several Islds. and bayous on either Side.
S. 50°. E.	1.	to the entrance of a bold running stream on Lard. side, distance by water 2½ M. at this place there is a very considerable rapid and clifts near on both sides
S. 45°. W.	½	mile to the lower point of an Island near the center of the Valley and river.
Miles	6½	

[Clark:]

August 16th Friday 1805

as this morning was Cold and the men fatigued Stiff and Chilled, deturmined me to detain & take brackfast before I set out, I changed the hands and Set out at 7 oClock proceeded on Something better than yesterday for the fore part of the Day passed Several rapids in the latter part of the day near the hills river passed between 2 hills I saw a great number of *Service berries* now ripe: the Yellow Current are also Common I observe the long leaf Clover in great plenty in the Vallie below this vallie. Some fiew tres on the river no timber on the hills or mounts. except a fiew Small Pine & Cedar. The Thmtr. Stood at 48°. a. o. at Sunrise wind SW. The hunters Joined me at 1 oClock, I dispatched two men to prosue an Indian roade over the hills for a fiew miles, at the narrows I assended a mountain from the top of which I could See that the river forked near me the left hand appeared the largest & bore S.E. the right passed from the West thro' an extencive Vallie, I could See but three Small trees in any Direction from the top of this mountain. passed an Isl^{d} and Encamped on the Lar^{d} Side[1] the only wood was Small willows

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[1] Half a mile above what is now called Clark's Cañon; at its mouth is the village of Grayling. — Ed.

CHAPTER XV

CROSSING THE GREAT DIVIDE

Lewis's Journal, August 17-20, 1805
Clark's Journal, August 17-20

[Lewis:] *Saturday August 17th 1805.* —

THIS morning I arrose very early and dispatched Drewyer and the Indian down the river. sent Shields to hunt. I made McNeal cook the remainder of our meat which afforded a slight breakfast for ourselves and the Chief. Drewyer had been gone about 2 hours when an Indian who had straggled some little distance down the river returned and reported that the whitemen were coming, that he had seen them just below. they all appeared transported with joy, & the ch[i]ef repeated his fraturnal hug. I felt quite as much gratifyed at this information as the Indians appeared to be. Shortly after Capt Clark arrived with the Interpreter Charbono, and the Indian woman, who proved to be a sister of the Chief Cameahwait. the meeting of those people was really affecting, particularly between Sah-cah-gar-we-ah and an Indian woman, who had been taken prisoner at the same time with her and who, had afterwards escaped from the Minnetares and rejoined her nation.[1] At noon the Canoes arrived, and we had the satisfaction once more to find ourselves all together, with a flattering prospect of being able to obtain as many horses shortly as would enable us to prosicute our voyage by land should that by water be deemed unadvisable.

We now formed our camp just below the junction of the forks on the Lard. side in a level smooth bottom covered with a fine terf of greensword. here we unloaded our canoes and arranged our baggage on shore; formed a canopy of one of our large sails and planted some willow brush in the ground to form a shade for the Indians to set under while we spoke to them, which we thought it best to do this evening. acordingly about 4.P.M. we called them together and through the medium of Labuish, Charbono and Sah-cah-gar-weah, we communicated to them fully the objects which had brought us into this distant part of the country, in which we took care to make them a conspicuous object of our own good wishes and the care of our government. we made them sensible of their dependance on the will of our government for every species of merchandize as well for their defence & comfort; and apprized them of the strength of our government and it's friendly dispositions towards them. we also gave them as a reason why we wished to pe[ne]trate the country as far as the ocean to the west of them was to examine and find out a more direct way to bring merchandize to them. that as no trade could be carryed on with them before our return to our homes that it was mutually advantageous to them as well as to ourselves that they should render us such aids as they had it in their power to furnish in order to haisten our voyage and of course our return home. that such were their horses to transport our baggage without which we could not subsist, and that a pilot to conduct us through the mountains was also necessary if we could not decend the river by water. but that we did not ask either their horses or their services without giving a satisfactory compensation in return. that at present we wished them to collect as many horses as were necessary to transport our baggage to their village on the Columbia where we would then trade with them at our leasure for such horses as they could spare us. They appeared well pleased with what had been said. the chief thanked us for friendship towards himself and nation & declared his wish to serve us in every rispect. that he was sorry to find that it must yet be some time before they could be furnished with firearms but said they could live as they had done heretofore untill we brought them as we had promised. he said they had not horses enough with them at present to remove our baggage to their village over the mountain, but that he would return tomorrow and encourage his people to come over with their horses and that he would bring his own and assist us. this was complying with all we wished at present. we next enquired who were chiefs among them. Cameahwait pointed out two others whom he said were Chiefs. we gave him a medal of the small size with the likeness of Mr. Jefferson the President of the U' States in releif on one side and clasp hands with a pipe and tomahawk on the other, to the other Chiefs we gave each a small medal which were struck in the Presidency of George Washing[*ton*] Esqr. we also gave small medals of the last discription to two young men whom the 1st. Chief informed us wer good young men and much rispected among them. we gave the 1st. Chief an uniform coat shirt a pair of scarlet legings a carrot of tobacco and some small articles to each of the others we gave a shi[r]t leging[s] handkerchief a knife some tobacco and a few small articles we also distributed a good quantity paint mockerson awles knives beads looking-glasses &c among the other Indians and gave them a plentifull meal of lyed (*hull taken off by being boiled in lye*) corn which was the first they had ever eaten in their lives. they were much pleased with it. every article about us appeared to excite astonishment in ther minds; the appearance of the men, their arms, the canoes, our manner of working them, the b[l]ack man york and the sagacity of my dog were equally objects of admiration. I also shot my air-gun which was so perfectly incomprehensible that they immediately denominated it the great medicine. the idea which the indians mean to convey by this appellation is something that eminates from or acts immediately by the influence or power of the great sperit; or that, in which, the power of god is manifest by it's incomprehensible power of action. our hunters killed 4 deer and an Antelope this evening of which we also gave the Indians a good proportion. the cerimony of our council and smoking the pipe was in conformity of the custom of this nation perfo[r]med bearfoot. on those occasions points of etiquet are quite as much attended to by the Indians as among scivilized nations. To keep indians in a good humour you must not fatiegue them with too much business at one time.

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[1] Biddle's narrative gives (i, p. 382) a fuller account of this episode.—ED.

therefore after the council we gave them to eat and amused them a while by shewing them such articles as we thought would be entertaining to them, and then renewed our enquiries with rispect to the country. the information we derived was only a repetition of that they had given me before and in which they appeared to be so candid that I could not avoid yeal[d]ing confidence to what they had said. Capt Clark and myself now concerted measures for our future operations, and it was mutually agreed that he should set out tomorrow morning with eleven men furnished with axes and other necessary tools for making canoes, their arms accoutrements and as much of their baggage as they could carry. also to take the indians, C[h]arbono and the indian woman with him; that on his arrival at the Shoshone camp he was to leave Charbono and the Indian woman to haisten the return of the Indians with their horses to this place, and to proceede himself with the eleven men down the Columbia in order to examine the river and if he found it navigable and could obtain timber to set about making canoes immediately. In the mean time I was to bring on the party and baggage to the Shoshone Camp, calculating that by the time I should reach that place that he would have sufficiently informed himself with rispect to the state of the river &c. as to determine us whether to prosicute our journey from thence by land or water. in the former case we should want all the horses which we could perchase, and in the latter only to hire the Indians to transport our baggage to the place at which we made the canoes. in order to inform me as early as possible of the state of the river he was to send back one of the men with the necessary information as soon as he should satisfy himself on this subject. this plan being settled we gave orders accordingly and the men prepared for an early march. the nights are very cold and the sun excessively hot in the day. we have no fuel here but a few dry willow brush. and from the appearance of [the] country I am confident we shall not find game here to subsist us many days. these are additional reasons why I conceive it necessary to get under way as soon as possible. this morning Capt Clark had delayed untill 7.A.M. before he set out just about which time Drewyer arrived with the Indian; he left the canoes to come on after him, and immediately set out and joined me as has been before mentioned. The sperits of the men were now much elated at the prospect of geting horses.

Courses and distances traveled by Cap^t. Clark August 17th. 1805.

S. 30° W. 4. to a high Knob or hill in the forks of Jefferson's River, the same being 10 M. by water. the river making a considerable bend to the Star^d. the forks of this river is the most distant point to which the waters of the Missouri are navigable. of course we laid up our canoes at this place and commenced our voyage by land.

Miles 4

[Clark:] *August 17th Satturday 1805*

a fair Cold morning wind S.W. the Thermometer at 42 a o. at Sunrise, We Set out at 7 oClock and proceeded on to the forks I had not proceeded on one mile before I saw at a distance Several Indians on horsback comeing towards me, The Interpreter & Squar who were before me at Some distance danced for the joyful sight, and She made signs to me that they were her nation,[1] as I aproached nearer them descovered one of Cap^t Lewis party With them dressed in their Dress; the[y] met me with great Signs of joy, as the Canoes were proceeding on nearly opposit me, I turned those people & Joined Cap^t Lewis who had Camped with 16 of those Snake Indians at the forks 2 miles in advance. those Indians Sung all the way to their Camp where the others had prov^d a cind [kind] of Shade of Willows Stuck up in a Circle the Three Chiefs with Cap^t. Lewis met me with great cordiallity embraced and took a Seat on a white robe, the Main Chief imediately tied to my hair Six Small pieces of Shells resembling *perl* which is highly Valued by those people and is pr[o]cured from the nations resideing near the *Sea* Coast. we then Smoked in their fassion without Shoes and without much ceremoney and form.

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[1] By sucking her fingers. — BIDDLE (i, p. 381).

Capᵗ Lewis informed me he found those people on the *Columbia* River about 40 miles from the forks at that place there was a large camp of them, he had purswaded those with him to Come and see that what he said was the truth, they had been under great apprehension all the way, for fear of their being deceived. The Great Chief of this nation proved to be the brother of the *woman* with us and is a man of Influence Sence & easey & reserved manners, appears to possess a great deel of Cincerity. The Canoes arrived & unloaded. every thing appeared to astonish those people. the appearance of the men, their arms, the Canoes, the Clothing my black Servent & the Segassity of Capᵗ Lewis's Dog. we spoke a fiew words to them in the evening respecting our rout intentions our want of horses &c. & gave them a fiew presents & medals. we made a number of enquires of those people about the Columbia River[1] the Countrey game &c. The account they gave us was verry unfavourable, that the River abounded in emence falls, one perticularly much higher than the falls of the Missouri & at the place the mountains Closed so Close that it was impracticable to pass, & that the ridge Continued on each Side of perpendicular Clifts inpenetratable, and that no Deer Elk or any game was to be found in that Countrey, aded to that they informed us that there was no timber on the river Sufficiently large to make Small Canoes, This information (if true is alarming) I deturmined to go in advance and examine the Countrey, See if those dificueltes presented themselves in the gloomey picture in which they painted them, and if the river was practi[c]able and I could find timber to build Canoes, those Ideas & plan appear[e]d to be agreeable to Capᵗ Lewis's Ideas on this point, and I selected 11 men, directed them to pack up their baggage Complete themselves with amunition, take each an ax and Such tools as will be Soutable to build Canoes, and be ready to Set out at 10 oClock tomorrow morning. Those people greatly pleased. our hunters killed three Deer & an antilope which was eaten in a Short time the Indians being so harrassed & compelled to move about in those rugid mountains that they are half Starved liveing at this time on berries & roots which they geather in the plains. Those people are not begerley but generous, only one has asked me for anything and he for powder.

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[1] Referring to the stream on which was the Shoshoni village — the Lemhi River, which falls into the Salmon River, a branch of the Columbia. — Ed.

This nation Call themselves *Cho-shon-nê* the Chief is name *Too-et-te-con'l* Black Gun is his war name *Ka-me-ah-wah* or come & Smoke. this Chief gave me the following name and pipe *Ka-me-ah-wah.* (*exchange names, custom I was called by this name af*^{d} *by the Snake In*^{ns})

[Lewis:] *Sunday August* 18th 1805.

This morning while Capt Clark was busily engaged in preparing for his rout, I exposed some articles to barter with the Indians for horses as I wished a few at this moment to releive the men who were going with Capt Clark from the labour of carrying their baggage, and also one to keep here in order to pack the meat to camp which the hunters might kill. I soon obtained three very good horses. for which I gave an uniform coat, a pair of legings, a few handkerchiefs, three knives and some other small articles the whole of which did not cost more than about 20$ in the U' States. the Indians seemed quite as well pleased with their bargin as I was. the men also purchased one for an old checked shirt a pair of old legings and a knife. two of those I purchased Cap^{t} C. took on with him. at 10 A.M. Cap^{t} Clark departed with his detatchment and all the Indians except 2 men and 2 women who remained with us. Two of the inferior chiefs were a little displeased at not having received a present equivolent to that given the first Chief. to releive this difficulty Cap^{t} Clark bestoed a couple of his old coats on them and I promised that if they wer active in assisting me over the mountains with horses that I would give them an additional present; this seemed perfectly to satisfy them and they all set out in a good humour. Cap^{t} Clark encamped this evening near the narrow pass between the hills on Jefferson's river in the Shoshone Cove. his hunters killed one deer which the party with the aid of the Indians readily consumed in the course of the evening. after there departure this morning I had all the stores and baggage of every discription opened and aired. and began the operation of forming the packages in proper parsels for the purpose of transporting them on horseback. the rain in the evening compelled me to desist from my operations. I had the raw hides put in the water in order to cut them in throngs proper for lashing the packages and forming the necessary geer for pack horses, a business which I fortunately had not to learn on this occasion. Drewyer Killed one deer this evening. a beaver was also caught by one of the party. I had the net arranged and set this evening to catch some trout which we could see in great abundance at the bottom of the river. This day I completed my thirty first year, and conceived that I had in all human probability now existed about half the period which I am to remain in this Sublunary world. I reflected that I had as yet done but little, very little, indeed, to further the hapiness of the human race, or to advance the information of the succeeding generation. I viewed with regret the many hours I have spent in indolence, and now soarly feel the want of that information which those hours would have given me had they been judiciously expended. but since they are past and cannot be recalled, I dash from me the gloomy thought, and resolved in future, to redouble my exertions and at least indeavour to promote those two primary objects of human existence, by giving them the aid of that portion of talents which nature and fortune have bestoed on me; or in future, to live *for mankind*, as I have heretofore lived *for myself*.

[Clark:] *August 18th Sunday 1805*

Purchased of the Indians three horses for which we gave a chiefs Coat Some Handkerchiefs a Shirt Legins & a fiew arrow points &c. I gave two of my coats to two of the under Chiefs who appeared not well satisfied that the first Chief was dressed so much finer than themselves, at 10 oClock I set out accompanied by the Indians except 3 the interpreter and wife,[1] the fore part of the day worm, at 12 oClock it became hasey with a mist of rain wind hard from the S.W. and cold which increased untill night the rain Seased in about two hours. We proceeded on thro' a wide leavel vallie without wood except willows & Srubs for 15 miles and Encamped at a place the high lands approach within 200 yards in 2 points the River here only 10 yards wide Several Small Streams branching out on each Side below. all the Indians proceeded on except the 3 Chiefs & two young men. my hunters killed two Deer which we eate. The Course from the forks is West 9 miles N. 60°. W. 6 miles. The Lat^{d} of the forks agreeable to observations is 43° –30′–43″ North [*actually about 45°*][2]

[Lewis:] *Monday August 19th. 1805*

This morning I arrose at d[a]ylight and sent out three hunters. some of the men who were much in want of legings and mockersons I suffered to dress some skins. the others I employed in repacking the baggage, making pack saddles &c. we took up the net this morning but caught no fish. one beaver was caught in a trap. the frost which perfectly whitened the grass this morning had a singular appearance to me at this season. this evening I made a few of the men construct a sein of willow brush which we hawled and caught a large number of fine trout and a kind of mullet about 16 Inches long which I had not seen before. the scales are small, the nose is long and obtusely pointed and exceeds the under jaw. the mouth is not large but opens with foalds at the sides, the colour of it's back and sides is of a bluish brown and belley white; it has the faggot bones, from which I have supposed it to be of the mullet kind. the tongue and pallate are smooth and it has no teeth. it is by no means as good as the trout.[1] the trout are the same which I first met with at the falls of the Missouri, they are larger than the speckled trout of our mountains and equally as well flavored. The hunters returned this evening with two deer. from what has been said of the Shoshones it will be readily perceived that they live in a wretched stait of poverty. yet notwithstanding their extreem poverty they are not only cheerfull but even gay, fond of gaudy dress and amusements; like most other Indians they are great egotists and frequently boast of heroic acts which they never performed. they are also fond of games of wrisk. they are frank, communicative, fair in dealing, generous with the little they possess, extreemly honest, and by no means beggarly. each individual is his own sovereign master, and acts from the dictates of his own mind; the authority of the Cheif being nothing more than mere admonition supported by the influence which the prop[r]iety of his own examplary conduct may have acquired him in the minds of the individuals who compose the band. the title of cheif is not hereditary, nor can I learn that there is any cerimony of instalment, or other epo[c]h in the life of a Cheif from which his title as such can be dated. in fact every man is a chief, but all have not an equal influence on the minds of the other members of the community, and he who happens to enjoy the greatest share of confidence is the principal Chief. The Shoshonees may be estimated at about 100 warriors, and about three times that number of woomen and children. they have more children among them than I expected to have seen among a people who procure subsistence with such difficulty. there are but few very old persons, nor did they appear to treat those with much tenderness or rispect. The man is the sole propryetor of his wives and daughters, and can barter or dispose of either as he thinks proper. a plurality of wives is common among them, but these are not generally sisters as with the Minnitares & Mandans but are purchased of different fathers. The father frequently disposes of his infant daughters in marriage to men who are grown or to men who have sons for whom they think proper to provide wives. the compensation given in such cases usually consists of horses or mules which the father receives at the time of contract and converts to his own uce. the girl remains with her parents untill she is conceived to have obtained the age of puberty which with them is considered to be about the age of 13 or 14 years. the female at this age is surrendered to her soveriegn lord and husband agreeably to contract, and with her is frequently restored by the father quite as much as he received in the first instance in payment for his daughter; but this is discretionary with the father. Sah-car-gar-we-ah had been thus disposed of before she was taken by the Minnetares, or had arrived to the years of puberty. the husband was yet living with this band. he was more than double her age and had two other wives. he claimed her as his wife but said that as she had had a child by another man, who was Charbono, that he did not want her. They seldom correct their children particularly the boys who soon become masters of their own acts. they give as a reason that it cows and breaks the sperit of the boy to whip him, and that he never recovers his independence of mind after he is grown. They treat their women but with little rispect, and compel them to perform every species of drudgery. they collect the wild fruits and roots, attend to the horses or assist in that duty, cook, dress the skins and make all their apparel, collect wood and make their fires, arrange and form their lodges, and when they travel pack the horses and take charge of all the baggage; in short the man dose little else except attend his horses hunt and fish. the man considers himself degraded if he is compelled to walk any distance; and if he is so unfortunately poor as only to possess two horses he rides the best himself and leavs the woman or women if he has more than one, to transport their baggage and children on the other, and to walk if the horse is unable to carry the additional weight of their persons. the chastity of their women is not held in high estimation, and the husband will for a trifle barter the companion of his bead for a night or longer if he conceives the reward adiquate; tho' they are not so importunate that we should caress their women as the siouxs were. and some of their women appear to be held more sacred than in any nation we have seen. I have requested the men to give them no cause of jealousy by having connection with their women without their knowledge, which with them, strange as it may seem is considered as disgracefull to the husband, as clandestine connections of a similar kind are among civilized nations. to prevent this mutual exchange of good officies altogether I know it impossible to effect, particularly on the part of our young men whom some months abstanence have made very polite to those tawney damsels. no evil has yet resulted and I hope will not from these connections. notwithstanding the late loss of horses which this people sustained by the Minnetares the stock of the band may be very safely estimated at seven hundred of which they are perhaps about 40 coalts and half that number of mules. these people are deminutive in stature, thick ankles, crooked legs, thick flat feet and in short but illy formed, at least much more so in general than any nation of Indians I ever saw. their complexion is much that of the Siouxs or darker than the Minnetares Mandands or Shawnees. generally both men and women wear their hair in a loos lank flow over the sholders and face; tho' I observed some few men who confined their hair in two equal cues hanging over each ear and drawnn in front of the body. the cue is formed with throngs of dressed leather or Otterskin a[l]ternately crossing each other. at present most of them have their hair cut short in the neck in consequence of the loss of their relations by the Minnetares. Cameahwait has his cut close all over his head. this constitutes their cerimony of morning for their deceased relations. the dress of the men consists of a robe long legings, shirt, tippet and Mockersons, that of the women is also a robe, chemise, and Mockersons; sometimes they make use of short legings. the ornements of both men and women are very similar, and consist of several species of sea shells, blue and white beads, bras and Iron arm bands, plaited cords of the sweet grass, and collars of leather ornamented with the quills of the porcupine dyed of various colours among which I observed the red, yellow, blue, and black. the ear is purforated in the lower part to receive various ornaments but the nose is not, nor is the ear lasserated or disvigored for this purpose as among many nations. the men never mark their skins by birning, cuting, nor puncturing and introducing a colouring matter as many nations do. there women sometimes puncture a small circle on their forehead nose or cheeks and thus introduce a black matter usually soot and grease which leaves an indelible stane. tho' this even is by no means common. their arms offensive and defensive consist in the bow and arrows shield, some, lances, and a weapon called by the Cippeways who formerly used it, the pog-gar'-mag-gon'.[1] in fishing they employ wairs, gigs, and fishing hooks. the salmon is the principal object of their pursuit. they snair wolves and foxes. I was anxious to learn whether these people had the venerial, and made the enquiry through the intrepreter and his wife; the information was that they sometimes had it but I could not learn their remedy; they most usually die with it's effects. this seems a strong proof that these disorders bothe ganaræhah [gonorrhea] and Louis Veneræ are native disorders of America. tho' these people have suffered much by the small pox which is known to be imported and perhaps those other disorders might have been contracted from other indian tribes who by a round of communications might have obtained from the Europeans since it was introduced into that quarter of the globe. but so much detatched on the other ha[n]d from all communication with the whites that I think it most probable that those disorders are original with them. from the middle of May to the first of September these people reside on the waters of the Columbia where they consider themselves in perfect security from their enimies as they have not as yet ever found their way to this retreat; during this season the salmon furnish the principal part of their subsistence and as this fish either perishes or returns about the 1st of September they are compelled at this season in surch of subsistence to resort to the Missouri, in the vallies of which, there is more game even within the mountains. here they move slowly down the river in order to collect and join other bands either of their own nation or the Flatheads, and having become sufficiently strong as they conceive venture on the Eastern side of the Rockey mountains into the plains, where the buffaloe abound. but they never leave the interior of the mountains while they can obtain a scanty subsistence, and always return as soon as they have acquired a good stock of dryed meat in the plains; when this stock is consumed they venture again into the plains; thus alternately obtaining their food at the risk of their lives and retiring to the mountains, while they consume it. These people are now on the eve of their departure for the Missouri, and inform us that they expect to be joined at or about the three forks by several bands of their own nation, and a band of the Flatheads. as I am now two busily engaged to enter at once into a minute discription of the several articles which compose their dress, impliments of war hunting fishing &c I shall pursue them at my leasure in the order they have here occurred to my mind, and have been mentioned.[1] This morning capt. Clark continued his rout with his party, the Indians accompanying him as yesterday; he was obliged to feed them. nothing remarkable happened during the day. he was met by an Indian with two mules on this side of the dividing ridge at the foot of the mountain, the Indian had the politeness to offer Capt. C. one of his mules to ride as he was on foot, which he accepted and gave the fellow a waistcoat as a reward for his politeness. in the evening he reached the creek on this side of the Indian camp and halted for the night. his hunters killed nothing today. The Indians value their mules very highly. a good mule can not be obtained for less than three and sometimes four horses, and the most indifferent are rated at two horses. their mules generally are the finest I ever saw without any comparison. today I observed time and distance of ☉'s and ☽'s nearest limbs with sextant ☉ East. it being the

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[1] Gass, who seems to have accompanied Clark's party, says (p. 173) that they ascended the Jefferson River to its head-waters, searching for timber with which to make canoes; not finding any, they crossed the mountain, and went to the Shoshoni village on the Lemhi — which had, according to the Biddle text, been removed to a place two miles farther up the river since Lewis's visit on Aug. 13. — Ed.

[2] In the Biddle text is here interpolated (i, pp. 386–390) a brief retrospective survey of the topography of the Missouri River valley. — Ed.

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[1] Mullet are the fish properly called suckers, belonging to the family *Catostomidæ*. This, according to Forster, was probably *Catostonius catostomus*. — Ed.

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[1] Biddle describes (i, p. 425) the "poggamoggon" as a wooden handle twenty-two inches long, covered with leather, to which is attached (by a two-inch thong) a round stone weighing two pounds, held in a leathern cover; it constitutes an effective weapon. — Ed.

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[1] The account of the Shoshoni tribe here referred to is given consecutively in the Biddle text (i, pp. 418–434). — Ed.

Point of Observation Nº 43.

	Time			Distance				Time			Distance		
	h	m	s	°	′	″		h	m	s	°	′	″
A.M.	11.	37.	11.	56.	53.	15.	A.M.	11.	51.	37	65.	47.	15.
	".	39.	50.	".	52.	–.		".	54.	43.	".	45.	30.
	".	44.	15.	".	50.	45.		".	55.	53.	".	44.	15.
	".	46.	18.	".	49.	–.		".	57.	40.	".	43.	30.
								".	59.	30.	".	42.	30.

Observed Meridian Altitude of ⊙'s L.L. with Octant by the back observation } 69° 15′. –″.
Latitude deduced from this observation. N. 44° 37′. 57″.4.

[Clark:] *August* 19th *Monday* 1805.

A verry Cold morning Frost to be seen we Set out at 7 oClock and proceeded on thro a wide leavel Vallie the Chief shew[ed] me the place that a number of his nation was killed about 1 years past this Vallie (wheel Vallie) Continues 5 miles & then becoms narrow, the beaver has Damed up the River in maney places we proceeded on up the main branch with a gradial assent to the head and passed over a low mountain and Decended a Steep Decent to a butifull Stream, passed over a Second hill of a verry Steep assent & thro' a hilley Countrey for 8 miles an[d] Encamped on a Small Stream, the Indians with us we wer oblige[d] to feed. one man met me with a mule & Spanish Saddle to ride, I gave him a west-coat a mule is considered a of great value among those people we proceeded on over a verry mountainous Countrey across the head of hollows & Springs

[Lewis:] *Tuesday August* 20th 1805.

This morning I sent out the two hunters and employed the ballance of the party pretty much as yesterday. I walked down the river about ¾ of a mile and scelected a place near the river bank unperceived by the Indians for a cash, which I set three men to make, and directed the centinel to discharge his gun if he pereceived any of the Indians going down in that direction which was to be the signal for the men at work on the cash to desist and seperate, least these people should discover our deposit and rob us of the baggage we intend leaving here. by evening the cash was completed unperceived by the Indians, and all our packages made up. the Pack-saddles and harnes is not yet complete. in this operation we find ourselves at a loss for nails and boards; for the first we substitute throngs of raw hide which answer verry well, and for the last [had] to cut off the blades of our oars and use the plank of some boxes which have heretofore held other articles and put those articles into sacks of raw hide which I have had made for the purpose. by this means I have obtained as many boards as will make 20 saddles which I suppose will be sufficient for our present exegencies. The Indians with us behave themselves extreemly well; the women have been busily engaged all day making and mending the mockersons of our party. In the evening the hunters returned unsuccessfull. Drewyer went in search of his trap which a beaver had taken off last night; he found the beaver dead with the trap to his foot about 2 miles below the place he had set it. this beaver constituted the whole of the game taken today. the fur of this animal is as good as I ever saw any, and beleive that they are never out of season on the upper part of the Missouri and it's branches within the mountains. Goodrich caught several douzen fine trout today. I made up a small assortment of medicines, together with the specemines of plants, minerals, seeds &c, which, I have collected betwen this place and the falls of the Missouri which I shall deposit here. the robe woarn by the Sho-sho-nees is the same in both sexes and is loosly thrown about their sholders, and the sides at pleasure either hanging loose or drawn together with the hands; sometimes if the weather is cold they confine it with a girdel arround the waist; they are generally about the size of a 2½ point blanket for grown persons and reach as low as the middle of the leg. this robe forms a garment in the day and constitutes their only covering at night. with these people the robe is formed most commonly of the skins of Antelope, Bighorn, or deer, dressed with the hair on, tho' they prefer the buffaloe when they can procure them. I have also observed some robes among them of beaver, moonox,[1] and small wolves. the summer robes of both sexes are also frequently made of the Elk's skin dressed without the hair. The shirt of the men is really a commodious and decent garment. it [is] roomy and reaches nearly half way the thye, there is no collar, the apperture being sufficiently large to admit the head and is left square at top, or most frequently, both before and behind terminate[s] in the tails of the animals of which they are made and which foald outwards being frequently left entire, or somtimes cut into a fring[e] on the edges and ornimented with the quills of the Porcupine. the sides of the shirt are sewed, deeply fringed, and ornamented in a similar manner from the bottom upwards, within six or eight inches of the sleve from whence it is left open as well as the sleve on it's under side to the elbow nearly. from the elbow the sleve fits the arm tight as low as the wrist and is not ornimented with a fringe as the side and under parts of the sleve are above the elbow. the sholder straps are wide and on them is generally displayed the taste of the manufacterer in a variety of figures wrought with the quills of the porcupine of several colours; beads when they have them are also displayed on this part. the tail of the shirt is left in the form which the fore legs and neck give it with the addition of a slight fringe. the hair is usually left on the tail, & near the hoofs of the animal; part of the hoof is also retained to the skin and is split into a fring by way of orniment. these shirts are generally made of deer's, Antelope's Bighorn's, or Elk's skins dressed without the hair. the Elk skin is less used for this purpose than either of the others. their only thread used on this or any other occasion is the sinews taken from the back and loins of the deer Elk buffaloe &c. their legings are most usually formed of the skins of the Antelope dressed without the hair. in the men they are very long and full each leging being formed of a skin nearly entire. the legs, tail and neck are also left on these, and the tail woarn upwards, and the neck deeply fringed and ornimented with porcupine qu[i]lls drags or trails on the ground behind the heel. the skin is sewn in such manner as to fit the leg and thye closely; the upper part being left open a sufficient distance to permit the legs of the skin to be dra[w]n underneath a girdle both before and behind, and the wide part of the skin to cover the buttock and lap before in such manner that the breechcloth is unnecessary. they are much more decent in concealing those parts than any nation on the Missouri the sides of the legings are also deeply fringed and ornimented. sometimes this part is ornimented with little fassicles of the hair of an enimy whom they have slain in battle. The tippet of the Snake Indians is the most eligant peice of Indian dress I ever saw. the neck or collar of this is formed of a strip of dressed Otter skin with the fur. it is about four or five inches wide and is cut out of the back of the skin the nose and eyes forming one extremity and the tail the other. begining a little behind the ear of the animal at one edge of this collar and proceeding towards the tail, they attatch from one to two hundred and fifty little roles of Ermin skin formed in the following manner. the skin is first dressed with the fur on it and a narrow strip is cut out of the back of the skin reaching from the nose and imbracing the tail. this is sewed arround a small cord of the silk-grass[1] twisted for the purpose and regularly tapering in such manner as to give it a just proportion to the tail which is to form the lower extremity of the stran[d]. thus arranged they are confined at the upper point in little bundles of two, three, or more as the disign may be to make them more full; these are then attatched to the collars as before mentioned, and to conceal the connection of this part which would otherwise have a course appearance they attatch a broad fringe of the Ermin skin to the collar overlaying that part. little bundles of fine fringe of the same materials is fastened to the extremity of the tails in order to shew their black extremities to greater advantage. the center of the otterskin collar is also ornamented with the shells of the perl oister.[2] the collar is confined aro[u]nd the neck and the little roles of Ermin skin about the size of a large quill covers the solders and body nearly to the waist and has the appearance of a short cloak and is really handsome. these they esteem very highly, and give or dispose of only on important occasions. the ermin whic[h] is known to the traiders of the N.W. by the name of the white weasel is the genuine ermine,[1] and might no doubt be turned to great advantage by those people if they would encourage the Indians to take them. they are no doubt extreemly plenty, and readily taken, from the number of these tippets which I have seen among these people and the great number of skins employed in the construction of each tippet. scarcely any of them have employed less than one hundred of these skins in their formation. This morning Cap^t. Clark set out at 6 in the morning and soon after arrived near their camp they [the Shoshones] having removed about 2 miles higher up the river than the camp at which they were when I first visited them. the chief requested a halt, which was complyed with, and a number of the indians came out from the village and joined them after smoking a few pipes with them they all proceeded to the village where Cap^t. C. was conducted to a large lodge prepared in the center of the encampment for himself and party. here they gave him one salmon and some cakes of dryed berries. he now repeated to them what had been said to them in council at this place which was repeated to the village by the Cheif. when he had concluded this address he requested a guide to accompany him down the river and an elderly man was pointed out by the Chief who consented to undertake this task. this was the old man of whom Cameahwait had spoken as a person well acquainted with the country to the North of this river. Cap^t. C. [*had Conversations*][2]

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[1] The monax or woodchuck. This was probably the Rocky Mountain species, *Arctomys flaviventer*. — ED.

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[1] The "silk grass" of the Southern States, also known as "Adam's needle and Eve's thread" (*Yucca filamentosa*), must have reminded Lewis of some related Western species, possibly the Spanish dagger plant. It has not been certainly identified. — ED.

[2] Probably these were bits of abalone shell; these have a lustrous surface, and are found on the coast of the Pacific. The Indians procured them by intertribal exchange. — ED.

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[1] There are two species of North American ermine or stoat, *Putorius erminea* and *P. longicauda*. Lewis and Clark procured a skin of the first on the Missouri (see Biddle's entry for Nov. 8, 1804). The type mentioned here was probably the second species; the two are practically the same for ornamental purposes. — Ed.

[2] We insert pp. 104-109 of Codex F, because its place here is indicated on the MS. in a memorandum by Clark (see p. 347, *note* 1, *ante*), whose account of his conversation with the chief is apparently copied (or rather rewritten) by Lewis. — Ed.

I now prevailed on the Chief to instruct me with rispect to the geography of his country. this he undertook very cheerfully, by delienating the rivers on the ground. but I soon found that his information fell far short of my expectation or wishes. he drew the river on which we now are [*i. e.*, Lemhi] to which he placed two branches just above us, which he shewed me from the openings of the mountains were in view; he next made it discharge itself into a large river which flowed from the S.W. about ten miles below us, then continued this joint stream in the same direction of this valley or N.W. for one days march and then enclined it to the West for 2 more days march. here he placed a number of heaps of sand on each side which he informed me represented the vast mountains of rock eternally covered with snow through which the river passed. that the perpendicular and even juting rocks so closely hemned in the river that there was no possibil[it]y of passing along the shore; that the bed of the river was obstructed by sharp pointed rocks and the rapidity of the stream such that the whole surface of the river was beat into perfect foam as far as the eye could reach. that the mountains were also inaccessible to man or horse. he said that this being the state of the country in that direction that himself nor none of his nation had ever been further down the river than these mountains. I then enquired the state of the country on either side of the river but he could not inform me. he said there was an old man of his nation a days march below who could probably give me some information of the country to the N.W. and refered me to an old man then present for that to the S.W. the Chief further informed me that he had understood from the persed nosed[1] Indians who inhabit this river below the rocky mountains that it ran a great way toward the seting sun and finally lost itself in a great lake of water which was illy taisted, and where the white men lived. I next commenced my enquiries of the old man to whom I had been refered for information relative the country SW. of us. this he depicted with horrors and obstructions scarcely inferior to that just mentioned. he informed me that the band of this nation to which he belonged resided at the distance of 20 days march from hence not far from the white people with whom they traded for horses mules cloth metal beads and the shells which they woar as orniment being those of a species of perl oister. that the course to his relations was a little to the West of South. that in order to get to his relations the first seven days we should be obliged to climb over steep and rocky mountains where we could find no game to kill nor anything but roots such as a ferce and warlike nation lived on whom he called the broken mockersons or mockersons with holes, and said inhabited those mountains and lived like the bear of other countries among the rocks and fed on roots or the flesh of such horses as they could take or steel from those who passed through their country. that in passing this country the feet of our horses would be so much wounded with the stones many of them would give out. the next part of the rout was about 10 days through a dry and parched sandy desert in which [there is] no food at this season for either man or horse, and in which we must suffer if not perish for the want of water. that the sun had now dryed up the little pools of water which exist through this desert plain in the spring season and had also scorched all the grass. that no animal inhabited this plain on which we could hope to subsist. that about the center of this plain a large river passed from S.E. to N.W. which was navigable but afforded neither Salmon nor timber. that beyond this plain th[r]ee or four days march his relations lived in a country tolerable fertile and partially covered with timber on another large river which ran in the same direction of the former. that this last discharged itself into a large river on which many numerous nations lived with whom his relations were at war but whether this last discharged itself into the great lake or not he did not know. that from his relations it was yet a great distance to the great or stinking lake as they call the Ocean. that the way which such of his nation as had been to the Stinking lake traveled was up the river on which they lived and over to that on which the white people lived which last they knew discharged itself into the Ocean, and that this was the way which he would advise me to travel if I was determined to proceed to the Ocean but would advise me to put off the journey untill the next spring when he would conduct me. I thanked him for his information and advise and gave him a knife with which he appeared to be much gratifyed. from this narative I was convinced that the streams of which he had spoken as runing through the plains and that on which his relations lived were southern branches of the Columbia, heading with the rivers Apostles and Collorado, and that the rout he had pointed out was to the Vermillion Sea or gulph of Callifornia. I therefore told him that this rout was more to the South than I wished to travel, and requested to know if there was no rout on the left of this river on which we now are, by means of which, I could intercept it below the mountains through which it passes; but he could not inform me of any except that of the barren plain which he said joined the mountain on that side and through which it was impossible for us to pass at this season even if we were fortunate enough to escape from the broken mockerson Indians. I now asked Cameahwait by what rout the Pierced nosed indians, who he informed me inhabited this river below the mountains, came over to the Missouri; this he informed me was to the north, but added that the road was a very bad one as he had been informed by them and that they had suffered excessively with hunger on the rout being obliged to subsist for many days on berries alone as there was no game in that part of the mountains which were broken rockey and so thickly covered with timber that they could scarcely pass. however knowing that Indians had passed, and did pass, at this season on that side of this river to the same below the mountains, my rout was instantly settled in my own mind, p[r]ovided the account of this river should prove true on an investigation of it, which I was determined should be made before we would undertake the rout by land in any direction. I felt perfectly satisfyed, that if the Indians could pass these mountains with their women and Children, that we could also pass them; and that if the nations on this river below the mountains were as numerous as they were stated to be that they must have some means of subsistence which it would be equally in our power to procure in the same country. they informed me that there was no buffaloe on the West side of these mountains; that the game consisted of a few Elk deer and Antelopes, and that the natives subsisted on fish and roots principally. in this manner I spent the day smoking with them and acquiring what information I could with respect to their country. they informed me that they could pass to the Spaniards by the way of the yellowstone river in 10 days. I can discover that these people are by no means friendly to the Spaniards. their complaint is, that the Spaniards will not let them have fire arms and amunition, that they put them off by telling them that if they suffer them to have guns they will kill each other, thus leaving them defenceless and an easy prey to their bloodthirsty neighbours to the East of them, who being in possession of fire arms hunt them up and murder them without rispect to sex or age and plunder them of their horses on all occasions. they told me that to avoid their enemies who were eternally harrassing them that they were obliged to remain in the interior of these mountains at least two thirds of the year where the[y] suffered as we then saw great heardships for the want of food sometimes living for weeks without meat and only a little fish roots and berries. but this added Câmeahwait, with his ferce eyes and lank jaws grown meager for the want of food, would not be the case if we had guns, we could then live in the country of buffaloe and eat as our enimies do and not be compelled to hide ourselves in these mountains and live on roots and berries as the bear do. we do not fear our enimies when placed on an equal footing with them. I told them that the Minnetares Mandans & recares of the Missouri had promised us to desist from making war on them & that we would indevour to find the means of making the Minnetares of fort d Prarie or as they call them Pahkees desist from waging war against them also. that after our finally returning to our homes towards the rising sun whitemen would come to them with an abundance of guns and every other article necessary to their defence and comfort, and that they would be enabled to supply themselves with these articles on reasonable terms in exchange for the skins of the beaver Otter and Ermin so abundant in their country. they expressed great pleasure at this information and said they had been long anxious to see the whitemen that traded guns; and that we might rest assured of their friendship and that they would do whatever we wished them.[1]

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[1] Commonly known as Nez Percé, also named Chopunnish; the largest branch of the Shahaptian stock, whose tribes occupied a large area on the Columbia and its tributaries, in Idaho and eastern Oregon. — ED.

Capt C. [then] encouraged the Indians to come over with their horses and assist me over with the baggage. he distrubuted some presents among the Indians. about half the men of the village turned out to hunt the antelope but were unsuccessfull. at 3 P.M. Capt. Clark departed, accompanyed by his guide and party except one man whom he left with orders to purchase a horse if possible and overtake him as soon as he could. he left Charbono and the indian woman to return to my camp with the Indians. he passed the river about four miles below the Indians, and encamped on a small branch, eight miles distant. on his way he met a rispectable looking indian who returned and continued with him all night; this indian gave them three salmon. Capt. C. killed a cock of the plains or mountain cock. it was of a dark brown colour with a long and pointed tail, larger than the dunghill fowl and had a fleshey protuberant substance about the base of the upper chap, something like that of the turkey tho' without the snout.

This day I observed time and distance of ⊙'s and ☽'s nearest Limbs with Sextant. ⊙ East.

	Time			Distance.				Time			Distance		
	h	m	s	°	′	″		h	m	s	°	′	″
A.M.	8.	16.	0.	53.	35.	30.	A.M.	8.	33.	29.	53.	27.	45.
	".	18.	36.	".	33.	30.		".	34.	14.	".	27.	30.
	".	21.	37.	".	31.	45.		".	35.	31.	".	27.	–.
	".	23.	12.	".	31.	30.		".	36.	43.	".	26.	45.
	".	25.	–.	".	30.	45		".	37.	12.	".	26.	–.
	".	27.	32.	".	29.	30		".	39.	20.	".	25.	15.
	".	29.	5.	".	29.	–.		".	40.	32.	".	25.	–.
	".	30.	11.	".	28.	45.							

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[1] Here ends the matter misplaced in Lewis's record, which we now resume where it was thus interrupted (at p. 379, *ante*). — Ed.

Longitude deduced from this observation.
West of Greenwich [blank space in MS.]

Latitude N. deduced from the Hor. ∠ of the P.M. Observation of ⊙'s center } 44° 33' 50.5"

Observed Equal Altitudes with Sextant of the Sun.

A.M.	8. 45. 30.	P.M.	3. 55. 40.	Altitude by Sextant at the time of obser. 68° 30'. –".
	". 47. 4.		". 57. 16.	
	". 49. 40.		". 58. 50.	

Observed Meridian Altitude of ⊙'s L.L. with Octant by the back observation } 70° –' –"

Latitude deduced from this observation. N. 44° 39' 43"

[Clark:] *August 20th Tuesday 1805 "So-So-ne" the Snake Indians*

Set out at half past 6 oClock and proceeded on (met maney parties of Indians) thro' a hilley Countrey to the Camp of the Indians on a branch of the Columbia River, before we entered this Camp a Serimonious hault was requested by the Chief and I smoked with all that Came around, for Several pipes, we then proceeded on to the Camp & I was introduced into the only Lodge they had which was pitched in the Center for my party all the other Lodges made of bushes,[1] after a fiew Indian Seremonies I informed the Indians [of] the object of our journey our good intentions towards them my Consirn for their distressed Situation, what we had done for them in makeing a piece with the *Minitarras Mandans Rickara* &c. for them. and requested them all to take over their horses & assist Capt Lewis across &c. also informing them the o[b]ject of my journey down the river, and requested a guide to accompany me, all of which was repeited by the Chief to the whole village.

Those pore people Could only raise a Sammon & a little dried Choke Cherries for us half the men of the tribe with the Chief turned out to hunt the antilopes, at 3 oClock after giveing a fiew Small articles as presents I set out accompanied

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[1] Gass says (p. 175) that there were in this village "about 25 lodges made of willow bushes;" and adds, "They are the poorest and most miserable nation I ever beheld." — Ed.

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by an old man as a Guide I endevered to procure as much information from thos people as possible without much Suckcess they being but little acquainted or effecting to be So. I left one man to purchase a horse and overtake me and proceeded on thro a wide rich bottom on a beaten Roade 8 miles Crossed the river and encamped on a Small run, this evening passed a number of old lodges, and met a number of men women children & horses, met a man who appeared of Some Consideration who turned back with us, he halted a woman & gave us 3 Small Sammon, this man continued with me all night and partook of what I had which was a little Pork verry Salt. Those Indians are verry attentive to Strangers &c. I left our interpreter & his woman to accompany the Indians to Capt Lewis tomorrow the Day they informed me they would Set out I killed a Pheasent at the Indian Camp larger than a dungal [dunghill] fowl with f[l]eshey protubrances about the head like a turkey. Frost last night.

END OF VOL. II